

EMPLOYEE DEVELOPMENT GUIDE
Employee and Trainer Guideline For
Veterinary Medical Officers

904 Veterinary Intern Program

Employee's Name

E.O.D. Date
(Entered on Duty)

District

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NOTE: 904D (Supervision): Please bring to the FSIS Training Center:

**Employee Development Guide
Step C Training Report**

904H: Please bring to the FSIS Training Center:

**Livestock Carcass Disposition Review
Employee Development Guide**

THE EMPLOYEE DEVELOPMENT GUIDE

EDG 904

This EDG (Employee Development Guide) is designed for your use in your development in the 904 course. It is arranged for use in conjunction with Steps A, B, C, D, E, F, G, and H. You will be directed by a trainer or supervisor in all steps. Following the directions in this guide and those given to you by your trainer will enable you to:

1. Carry out your assignments with an increasing degree of independence.
2. Progress from using basic skills and knowledge for solving problems of narrow scope and limited complexity to using specific technical skills and knowledge, experience, and judgment for solving problems of broad scope and high complexity.
3. Eventually assume the full responsibilities of your duty station.

Step A (Orientation) will be conducted in the district office. This will give you the opportunity to see what happens in the office and to meet and talk with the district manager. The district manager, the assistant district manager, or the resource management specialist will conduct the orientation. Phase 2 orientation and a portion of Phase 3 will be covered in this step.

Step B (Plant familiarization) will give you the opportunity to become familiar with a slaughter plant. It will be conducted at your first duty station or at a plant that is similar to your first duty station or at a designated training station. A portion of Phase 3 orientation will be covered in this step.

Step C (Technical on-the-job training) will be conducted at a designated training station under the direction of a designated trainer. A designated training station is a slaughter plant that has been selected as an efficient training site because it has:

1. An inspection team that is well qualified and motivated to assist you;
2. A cooperative plant management; and
3. Facilities with ample work space for studying and coaching.

A designated trainer is a veterinarian who is recognized by peers and supervisors as an above average performer and a role model in performance, conduct, and professional image. The designated trainer and the inspection team will help you in your development as a Veterinary Medical Officer. The pages marked C in the upper right-hand corner of this guide will be covered in this step. This step includes viewing computer-based modules and taking exams.

Step D Supervision and Management portion will be taught at the Training Center in College Station.

Step E (OJT in IIC responsibilities) will most likely take place in the same plant where you completed your Step C training--though it could take place in another plant. This step gives you the opportunity to apply, under the close guidance of a designated trainer, the new knowledge and skills you acquired in Step D and also gives you the chance to continue developing the skills started in Step C.

Step F (Assessment assignment) will most likely take place in the same place where you completed your Step C training--though it could take place in a plant more similar to your duty station. You get the opportunity to apply your new knowledge and skills with only limited guidance. Your progress during this assignment will be assessed to determine if you are ready to assume the full responsibilities of your duty station.

Step G (Independent assignment) is at your duty station. Here you will assume the full responsibilities of your job while receiving supervision and guidance from your immediate supervisor. During this 8 month period you will strengthen your skills, knowledge, experience, and judgment in order to achieve total mastery of the objectives in the EDG. Your immediate supervisor will determine the acceptability of your development during this step.

Step H (Seminar) will occur sometime after the 8th month of employment. The seminar will be held at the FSIS Training Center. Your IIC responsibilities, veterinary livestock dispositions, and your supervision/management responsibilities will be reviewed in depth.

As you probably noticed, the first months of your FSIS career will involve traveling to one or more plants for on-the-job training and to the FSIS Training Center for formal classroom training. Your traveling may take you away from your duty station for extended periods of time.

Periodically, industry, designated trainers, and 904 trainers have questions concerning the authority of 904 trainees to take official actions during the time they are assigned to designated training stations.

All concerned parties should follow the guide listed below:

During 904 *Step C* the trainees may not take any official action unless they are directly instructed to do so by the designated trainer. Trainees have no authority to take any independent official action.

During 904 *Step E* trainees are learning to combine the technical and supervisory knowledge and skills acquired in earlier steps. They must receive close supervision and guidance from the designated trainer. When the trainer is satisfied that the trainee has mastered a particular training objective, the trainer may permit the trainee to apply this knowledge in an official capacity. The trainee may take independent official action only for those items specified by the trainer.

During 904 *Step F* the trainees are being assessed on their readiness to assume the responsibilities at their duty stations. Usually, trainees assume the responsibilities of the IIC at the training station. However, trainers are responsible for the trainees' actions and should provide close supervision and be readily available to assist trainees. Trainees, at the discretion of the trainer, may take independent official actions without specific instruction from the trainer.

VETERINARY INTERN PROGRAM

Meat and Poultry (904)

STEP A

District Office
Orientation
2 Days

STEP B

Designated Training Station
Plant Familiarization
Approximately 5 Days

STEP C

Designated Training Station
Technical OJT
Approximately 4 weeks

STEP D

Training Center Classroom
Supervision/Management,
Approximately 2 weeks

STEP E

Designated Training Station
OJT in IIC Responsibilities
Minimum of 2 weeks

STEP F

Designated Training station
Assessment Assignment
Trainee gets the opportunity to apply the new knowledge
and skills with limited supervision.
Minimum of 1 week

STEP G

Duty Station
Independent Assignment
Approximately 4 – 8 months

STEP H

Training Center
Seminar
(7) In-depth review of supervision/management responsibilities;
(2) in-depth review of IIC responsibilities; and (3) review of
carcass disposition.

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Approximately 4 – 8 months

STEP H

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Seminar
(8) In-depth review of supervision/management responsibilities;
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OUTLINE FOR VETERINARY INTERN PROGRAM 904 (MEAT)

Date: _____
Prepared/Updated

Employee name: _____ EOD: _____

Duty Station: _____ Est: _____ Species: _____

STEP A (Orientation) District Office Location _____

Dates _____ Tour of Duty _____

STEP B (Plant familiarization) Location _____

Dates _____ Tour of Duty _____ Est. _____

Travel Instructions _____

Trainer's Name _____ Telephone _____

STEP C (Technical on-the-job training) Location _____

Dates _____ Tour of Duty _____ Est. _____

Travel Instructions _____

Trainer's Name _____ Telephone _____

STEP D

(Classroom training) College Station, TX Dates _____

STEP E (OJT in IIC responsibilities) Location _____

Dates _____ Tour of Duty _____ Est. _____

Travel Instructions _____

Trainer's Name _____ Telephone _____

STEP F (Assessment assignment) Location _____

Dates _____ Tour of Duty _____ Est. _____

Travel Instructions _____

Trainer's Name _____ Telephone _____

STEP G (Independent assignment) Dates _____

STEP H (Seminar) FSIS Training Center Dates _____

Distribution: Trainee, Designated Trainer, FSIS Training Center

WELCOME TO THE FSIS TEAM!

Introduction

You are now working for the federal government. You are joining approximately 3.5 million civil servants who are proud to serve the public as representatives of the government of the United States. Your first days will be spent completing the paperwork and activities necessary to put you on the employee rolls. The conduct expected of representatives of the federal government will be explained to you. Listen carefully. In these same first days you will also complete the activities and paperwork necessary to register as a member of the Food Safety and Inspection Service Program workforce. You join approximately 10,000 conscientious and dedicated personnel who are proud of their contribution to America's well being.

Orientation

Generally, your orientation is divided into three phases. Phase I consists of the pre-appointment package you received prior to reporting for duty. Phase II, the entrance phase, is conducted when you begin duty at the appropriate district office. During Phase II orientation, you will be informed of what will be expected of you and what you can expect from the organization. The performance that will be expected from you during the probationary period will be described. It will be pointed out to you that your performance rating will reflect work efficiency. The action that could be taken in case of unsatisfactory performance or misconduct will also be described.

Forms

During Phase II, you should also submit the following forms:

1. Declaration Sheet (AD-349)
2. Medical Certificate (SF-78)
3. Fingerprints (SF-87)
4. Appointment Affidavits (SF-61)
5. Declaration of Appointee (SF-61B)
6. W-4 Forms
7. Data for Non-sensitive or Non-critical-Sensitive Positions (SF-85)
8. Race and National Origin Identification (SF-181)
9. Self-Identification of Medical Disability (SF-256)
10. U.S. Savings Bond Authorization for Purchase and Request for Change (SF-1192)
11. Election, Declination, or Waiver of Life Insurance Coverage (SF-176)
12. Change of Beneficiary (SF-54 and SF-1152)

13. Request (Employee) for Payment of Salaries or Wages for Credit to Account at a Financial Organization (SF-1189)

**Supervisory
Checklist**

Phase III, the establishment orientation, takes place at the plant where you will be assigned for Step B Plant Familiarization. However, portions of Phase III will be covered in Step A.

PREPARATION FOR STEP B

Before leaving the site of this orientation, make sure you are prepared for Step B in your training by completing the following.

For Step B training I should:

1. Report to Dr. _____
2. In _____ , _____
(Plant name) (Street address)

(City) (State) (Zip)
3. At _____ (a.m./p.m.), on _____ (Date)
4. And in case of delay or emergency I should contact
_____, at _____.
5. Room reservations have been made for met at
_____, in _____.
(Hotel/Motel) (City)
6. I have been issued the following items:
 - a. Meat and Poultry Inspection Regulations Yes _____ No _____
 - b. Meat and Poultry Inspection Manual Yes _____ No _____
 - c. Helmet Yes _____ No _____
 - d. Accountable Equipment Yes _____ No _____
7. For Step C training I should contact Dr. _____
at _____.
(Telephone No.)

District Office

When you are satisfied that this employee has been given proper and adequate orientation training as outlined in FSIS Directive 4200.2 and the employee has been issued the above items (or told where to get them), and given adequate instructions for reporting to the next training site, date and sign below.

(Signature)

(Date)

(This form stays in the EDG.)

904 ASSIGNMENT PROFILE
(Prepared by Employee's District Office)

Employee's Name: _____

Employee's Duty Station: _____

EOD: _____

(Entered on Duty)

Species	Line Speed	No. of Insp.	Operation Type
_____	_____	_____	_____
_____	_____	_____	_____

Describe the special attention required in this assignment in the following areas:

Antemortem	_____ _____ _____
Postmortem	_____ _____ _____ _____
Sanitation	_____ _____ _____ _____
Est. Management	_____ _____ _____ _____
Other	_____ _____ _____

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TRAINING POLICIES & PROCEDURES FOR STEP B TRAINER

- Before the employee arrives at your plant, review Step B of the 904 Employee Development Guide (EDG).
- After the employee arrives at your plant, review the 904 Assignment Profile at the end of Step A in the employee's copy of the EDG.
- Try to follow the suggested schedule in the 904 EDG. Feel free to alter the schedule. The schedule is only to be used as a guide.
- Discuss the employee's training problems (e.g., knowledge deficiencies, failure to develop skills) with the FSIS Training Center. You may call collect (409) 260-9433.
- Handle the employee's personnel problems (e.g., tardiness, AWOL, Leave, Travel, T&A) through normal supervisory channels.
- Complete and mail the Supervisory Checklist for Orientation--Phase III form located at the end of Step B in the employee's EDG.
- Complete the Step B Training Report located at the end of Step B in the employee's EDG.
- Verify the location, the time, and the date the employee is to report to the designated training station for Step C.

THE FOOD SAFETY AND INSPECTION SERVICE PROGRAM

Background

The meat and poultry products manufactured in the United States are among the finest in the world. Highly sanitary slaughtering processes, diligent quality assurance, and truthful labeling have increased consumer confidence in meat and poultry products to a very high level. Technological advances are continually being introduced by industry to produce tastier, more economical, more nutritious, and more convenient meat and poultry products than ever before. But it was not always so.

While America was young, meat was produced near the consumer. Usually families raised and slaughtered their own animals at home. As the cities grew, however, the slaughtering operations had to be moved far out of town or were centralized in large operations. No longer could city families raise their own meat and poultry. Consumers had to buy meat produced from animals they had never seen, produced under conditions they had never seen, and stored before refrigeration and freezing were a way of life as they are today. Packers could no longer raise all the animals they slaughtered, and had to buy from huge stockyards. In addition, many animal diseases had not yet been controlled. Some of these, like TB, trichinosis, and brucellosis, are transmissible to man. With no plant personnel trained in the detection of diseases, and refrigeration not yet used on a massive scale, conditions in packing plants deteriorated as the demand for meat increased. Finally, in the late 1800's, European countries placed an embargo on our meat. No meat could be sold to European markets.

Shortly after, by passing a bill providing for inspection of meat for export, Congress caused the ban to be lifted. But this bill did not provide for inspection of products not to be exported, so most of the domestic meat supply remained uninspected. Conditions in the plants continued to deteriorate.

Finally, after an investigation, prominent author Upton Sinclair wrote *The Jungle*, published in 1906, which graphically revealed the conditions and problems of the packing plants to the public. Then the "embalmed beef" scandal broke. Meat "preserved" with formalin (embalming fluid) sickened and killed many American soldiers fighting in Cuba. President Theodore Roosevelt was horrified and personally crusaded for mandatory inspection to regulate the production of this vital food item. As a result, late in 1906, the congress passed the first Meat Inspection Act providing for:

1. Mandatory inspection of all meat and meat food products in interstate and export commerce.
2. Required antemortem and postmortem inspection of all animals.
3. Maintenance of minimal sanitation requirements.
4. Processing conducted according to the regulations.
5. Adequate and truthful labeling.
6. Maintenance of approved plant and facilities.

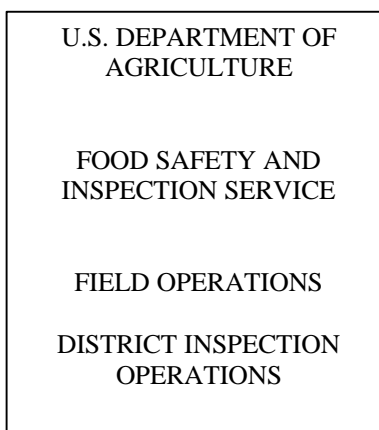
Over the years the meat industry flourished. Many animal diseases were controlled or eradicated. More uniform, higher quality animals could then be raised by ranchers and feedlots. Faster, cleaner production methods were invented by packers. Faster, cleaner distribution systems were continually being implemented. Only one flaw in the law remained. The meat inspection Act applied only to those plants that shipped to other states, exported, or sold to federal government agencies. Plants doing business wholly within one state were exempt. As the population increased, some areas had a significant portion of their meat supplied by packing plants that sold only within the state and so were exempt from inspection.

The Meat Inspection Act of 1967 (Wholesome Meat Act) was passed to assure that all meat in the United States receive inspection at least equal to federal inspection. The Act is carried out by either federal or state inspection systems. Poultry inspection became mandatory for plants shipping interstate, exporting, or selling to federal government agencies in 1959. This Act was amended in 1968 to include intrastate plants.

Meat inspection has been under several different government agencies since 1906 and poultry inspection used to be a separate organization. The two inspection programs merged in 1968, then were merged with the USDA's Animal and Plant Health Service in 1972 to form APHIS--the Animal and Plant Health Inspection Service. Meat and Poultry Inspection is now in the USDA's Food Safety and Inspection Service. The changes in organizational structure over the years reflect the dynamic and expanding nature of the meat and poultry industries that the FSIS Program regulates. The latest organizational change is an effort to incorporate into the program the increased technological expertise required to inspect the ever-widening range of products and the greatly advanced industry production systems. The relationship of inspection to the Veterinary Services in APHIS reflected the advantages of cooperation between the meat and poultry slaughter operations and disease eradication efforts in feedlots, poultry houses, farms, and ranches. The new organization, working with the industries, promises to increase the quality of life for all producers and consumers of American meat and poultry.

Your Role

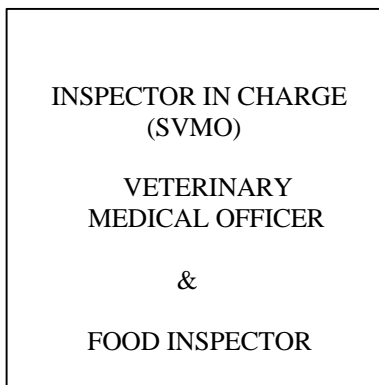
WASHINGTON



District Office

Circuit Supervisor

THE SLAUGHTER PLANT



Sometimes it is difficult for new employees to explain to their families and to others just what it is that they will be doing in their new position.

You are now a veterinary medical officer.

You work for the USDA--United States Department of Agriculture, FSIS--OFO--District Inspection Operations.

You monitor the inspection of livestock and the carcasses and parts from them so that only products that are wholesome and free of disease are sold to consumers. Meat grading is different from meat inspection. The grader evaluates wholesome meat already passed by FSIS and grades it as to quality. (In beef, grades include prime, choice, good, etc.)

In general terms, your job as an FSIS employee is to:

1. Prevent unwholesome products from reaching the consumer.
2. Conduct inspection with dignity and ethical practices beyond reproach.
3. Keep current with inspection and industry changes.

SUGGESTED SCHEDULE

Step B

You have reported to a meat packing plant, one of the more than 6,500 plants in the United States under federal inspection. The inspector in charge of the packing plant, your trainer, is also a graduate veterinarian. Your trainer is ready to help guide you as you study and practice. Your trainer's success depends on your success. Your trainer is there to help you answer your questions, so feel free to ask.

The employees who seem to benefit the most from the basic livestock training offered by FSIS are those who have some actual in-plant familiarization before beginning their formal studies. To learn most quickly the huge number of facts used daily by FSIS employees, you should know the vocabulary of the job and should be able to visualize actual working conditions from the films, slides, and diagrams used in the Step C training. Step B is designed to give you those in-plant experiences that most facilitated learning. It is not intended to be a complete dissertation on inspection--it contains only enough information to prepare you for the Step C training that will follow.

Step B of your training is scheduled for a typical plant doing a usual day's operations. Any changes from the normal could very well require a change in your schedule. You are scheduled for five days of training, which is considered a guide. If Step B takes longer than five days, you should inform your Step C trainer.

A suggested five-day schedule is given on the following pages. When the situation demands a different timetable, your Step B trainer will adjust your schedule accordingly. A suggested breakdown of the time that should be devoted to each area is:

General Plant Orientation	1 hour
Plant Facilities	1 hour
Safety	1 hour
Plant Tour	3 hours
Knife Sharpening	2 hours
Antemortem	5 hours
Packing Plant Equipment	1 hour
Anatomy Review	2 hours
Cattle Postmortem Inspection	6 hours
Identification Systems and Records	1 hour
Swine Postmortem Inspection	4 hours
Restricted Products	1 hour
Condemned and Inedible Material	2 hours
Sanitation	2 hours
Viscera Separation	1 hour
Fabrication	1 hour
Reinspection	2 hours
Food Preparation	<u>1 hour</u>
Total hours	37 hours

FIRST DAY

You will report to a plant for introduction to your trainer and follow his/her directions.

Your trainer will do the following:

1. Complete the Phase III orientation. Phase III should be completed within 10 days of your starting date. Upon completion of the Phase III orientation, both you and your supervisor should sign and date the Phase III supervisory checklist (Page B.14.1) and mail it to:

USDA,FSIS
Personnel Operations Branch
Butler Square West, 4th Floor
100 North Sixth Street
Minneapolis, MN 55403

2. Give you a tour of the inspection office and dressing room (locker room).
3. Discuss work clothes, head covering, footwear, and proper work habits.
4. Have you read the Plant Facilities material in this step of the EDG.
5. Have you read the Safety material in this step of the EDG.
6. Discuss plant and kill floor safety principles.
7. Discuss the good conduct that is expected and required.
8. Give you a general tour of the plant.
 - a. The objective is to acquaint you with the general layout of the plant.
 - b. Your trainer will allow you to ask questions and take notes, but will not attempt to teach you the intricacies of plant operations, flow of product, and inspection at this time.
9. Discuss the care and use of FSIS equipment and facilities.
10. Demonstrate the proper grinding, rubbing, and steeling of a knife and allow you time to practice.
11. Discuss the importance of maintaining a sharp knife.
12. Provide you with a sharp knife, because at this time you will be unable to maintain a sharp knife.

PLANT FACILITIES

Introduction

The design and use of plant facilities greatly influences product wholesomeness. A wide range of facility designs and types of equipment is in use today. Variations occur in rate of speed, scope of operation, storage capacity, and many other features. The FSIS Program has guidelines within which all blueprints and equipment must fall. These guidelines permit flexibility in design and use while still assuring that the system is capable of producing wholesome products.

Follow the directions in this part to grasp the basic principles of the interrelationship between plant facilities, the slaughtering process, and inspection. The livestock slaughter inspector is responsible for monitoring the use of the area and equipment around the inspection stations. You need to be able to recognize instances of incorrect operation and take the appropriate action (as instructed by your duty station supervisor). Before you can do this, however, you need to learn what facilities there are and what activities occur in each. This part deals with what basic facilities there must be to convert live animals into human food according to MPI Regulations, what the plant employees do in each area to produce the meat, and where the antemortem and postmortem inspection area are located in the conversion process.

The Conversion Process

The conversion process from live animals to human food consists of the following major steps.

Major Steps-- In Order of Occurrence		Separates the Following Parts
1.	Stun*, bleed.....	The blood from the carcass
2.	Clean outside of carcass.....	The hide, hair, or pelt from the carcass
3.	Eviscerate.....	The internal organs (viscera) from the carcass
4.	Prepare the carcass for inspection.	

THE CARCASS AND PARTS ARE INSPECTED AT THIS POINT

5. Destroy and remove inedible and condemned material from the premises according to the Regulations. Examples: hide, hair, stomach, contents, diseased carcasses and parts, contaminated carcasses and parts.

Each of these major steps takes place in an area inside the slaughter plant. Each area is named, and contains the equipment needed to accomplish the step of the conversion process. The equipment is described in another part of this guide. The rest of this section describes the usual facilities in packing plants and some of the more common variations. During the demonstration, your trainer will show you the facilities at this plant.

STEPS IN THE CONVERSION PROCESS DIAGRAM GOES HERE

**Facility
Recognition**

The following is a brief outline of the basic facilities in the average-sized plant. The designs will vary from plant to plant, and depend also on what species of animal (cattle, swine, sheep, etc.) is being slaughtered. After your facilities demonstration and discussion, be able to locate any of the following areas when your trainer asks.

Restraining area for live animals.

1. Cattle--knocking box
2. Swine--squeeze chute

Landing area for unconscious animals (cattle--dry landing area, in which shackling takes place).

Bleeding area. "Blood pit"--blood is confined to a specific area.

Skinning (cattle) or **scalding and dehairing** (swine) **areas.** If the carcass is skinned while suspended from an overhead rail, it is called "on-the-rail dressing." If the carcass is skinned while on the floor it is called a "bed dress." The equipment varies. Your trainer will explain what is used at this plant.

***ON-THE-RAIL SKINNING AND BED DRESS SKINNING DIAGRAM GOES
HERE***

In swine dressing, the scalding is done in a large tub of hot water. Dehairing is accomplished in one or more of several ways.

1. A "dehairing machine"
2. A "rosin dip."
3. A "polisher."
4. Flame "singers"--sing the hair stubble off with flames.
5. "Shavers"--plant employees who shave the hogs.

You should have no trouble recognizing these dehairing methods once you see them.

Head preparation.

Cattle. The head is removed in the bleeding area; skinned; dehorned if necessary; cleaned in a "head wash cabinet;" then presented for inspection at the "cattle head inspection area." The head may be on a moving chain or a stationary "head rack."

Swine. The head is prepared for inspection after the outside of the carcass is cleaned and rinsed. The head may be left attached by one jaw to the carcass, or presented for inspection in a pan by the viscera on a moving table. Facilities vary from plant to plant.

Eviscerating (removing the internal organs) **area.** A company employee removes the viscera at a designated location. The viscera may be placed on a moving table for inspection or in a "viscera truck" for inspection. Again, facilities vary from plant to plant.

Preparation of edible (inspected and passed) **parts.** Areas to prepare the heads, viscera, and carcasses vary. Equipment consists of racks, tables, trays, washing devices, hoses etc. Heads are "boned"--the edible tissues are removed from the skull. Tongues and brains may also be saved. The viscera parts (livers, hearts, tripe, casings, etc.) are prepared by trimming and cleaning as necessary. The requirements depend on the kind of part and how it is to be labeled when sold to the consumer. These requirements are covered in the classroom lecture portion of the training program.

Hand washing, cleanup, and sanitizing facilities. These consist of strategically placed lavatories, sanitizers, hoses, floor drains, equipment washing areas, and other devices. The requirements for the different types of devices, plus their placement and use, are included in the classroom segment of training. The postmortem inspector monitors the use of the hand-washing and sanitizing facilities and takes corrective action when they are not functioning correctly, or are not used when required.


Condemned and inedible materials handling. Such material may be put in large cans marked "Condemned" or "Inedible," troughs under the eviscerators, and in conveyor pipes directly to the "tank room." Where does the blood go? Where does the hog hair and scald water go? Where does the cattle paunch content go? What do they do with condemned material? Does this plant save anything for animal food? Ask questions. Your trainer will tell you what this plant does. Remember, the regulatory requirements and inspection procedures for facilities and equipment are given in the classroom segment.

The Tank Room. Most plants have a separate room set aside for the denaturing and tanking of condemned and inedible material. Condemned and inedible material is treated to make it obviously unfit for human food (by taste, smell, or sight) before it leaves the plant. The few exceptions will be discussed in class, along with their requirements. The two most common methods of making condemned and inedible products obviously inedible to humans are denaturing and tanking. Your trainer will show you what is done at this plant. The different methods, and their inspection and recording requirements, will be covered in the classroom segment of the training program.

Diagrams

Study the following diagrams outlining:

- The basic areas in the plant.
- The basic processes that take place in the areas, and
- Where the antemortem and postmortem inspection takes place in relation to the basic slaughter process.

Remember that the plant employees perform the slaughtering, and the inspectors examine the animals, carcasses, and parts for diseases and abnormalities at the inspection points indicated by the  symbols.

There is a set of diagrams (numbers 1, 2, and 3) for cattle slaughter and a set (numbers 4, 5, and 6) for swine slaughter. The major difference is in the cleaning of the outside of the carcass: the facilities for skinning cattle are different from those for scalding and dehairing swine.

Practice following the product flow on these diagrams, naming the areas, briefly describing their use, and noting where in the flow antemortem and postmortem are performed.

***1. FACILITIES FOR CATTLE SLAUGHTER, NAMES OF THE BASIC
PLANT AREAS DIAGRAM GOES HERE***

**2. *FACILITIES FOR CATTLE SLAUGHTER, NAMES OF THE BASIC
 DRESSING PROCEDURES DIAGRAM GOES HERE***

**3. *FACILITIES FOR CATTLE SLAUGHTER, ANTEMORTEM AND
POSTMORTEM INSPECTION AREAS DIAGRAM GOES HERE***

**4. *FACILITIES FOR SWINE SLAUGHTER, NAMES OF THE BASIC
 PLANT AREAS DIAGRAM GOES HERE***

**5. *FACILITIES FOR SWINE SLAUGHTER, NAMES OF THE BASIC
DRESSING PROCEDURES DIAGRAM GOES HERE***

**6. *FACILITIES FOR SWINE SLAUGHTER, THE LOCATIONS AT WHICH
ANTEMORTEM AND POSTMORTEM INSPECTIONS TAKE PLACE
DIAGRAM GOES HERE***

SAFETY

Introduction

Safety is vital. The kill floor is a dangerous place!

The topic of safety is placed early in this guide to emphasize its importance. There is a safety factor to every skill and procedure you will perform. Learn not just how to do a procedure; learn how to do it safely. Don't let your guard drop. A moment's hesitation or distraction can cause accidents. Even good inspectors get hurt when they hurry or are overtired. Take care of your health, too.

You will be rated daily on your compliance with safe practices. Deviations will be discussed with you. When in doubt, ask. The emphasis is on helping you learn from the beginning.

General

Many times our training programs in food inspection do not stress the importance of safety. Actually, good inspection techniques are concurrent with safe practices and vice versa. Remember that it's just a fleeting instant of carelessness or inattention that cause most accidents. Often familiarity breeds contempt, so a comprehensive review of particular hazards in our business should be of considerable importance for both old and new inspectors. This section should be kept and new suggestions added as required.

Food for Thought. Remember--safety is as safety does. Certainly no one looks forward to an accident, so we should look out for our own safety. Remember that old, tried quotation, "Only you can prevent accidents." You are the most important single factor.

Clothing. Wear good, neat-fitting clothes. Loose, ill-fitting clothing is more likely to entangle in moving equipment or machinery. Wear warm clothing for cooler work--plan it so you can remove outer clothing if you have warm and cold areas in which you must work.

Headwear. Protective helmets are important for your personal safety. A protective helmet will protect you from many minor lacerations and contusion--and one day may protect you from a fatal head injury.

Footwear. When you are well supported, you are not as subject to fatigue and distraction. Good, nonskid soles are recommended. Plastic rubbers are fine for warm, greasy areas in tank rooms and killing floors.

Hearing Protection Devices. Hearing protection devices must be worn in areas when noise levels reach 85 decibels. This is required for your own protection.

Conduct. Inspectors and their actions are continuously watched by company employees and compared with their own behavior. Sometimes their evaluations might seem prejudiced but we have to admit that there are individual inspectors who do things well enough to command the respect of all. They maintain good safety practices wherever they are. There is no room for "fooling around" in our daily work or even for allowing it in our presence. An inspector should never race trucks or people. If possible, avoid slippery places--never jump from one bench to another or jump off high places. Do not operate company machinery.

Correct Inspection Procedures. To learn our inspection procedures, make a study of each move made. These procedures are considered safe.

Killing Floor

Knives. A significant portion of your work is performed with a knife. Learn the principles of knife safety. "Pushing" a dull knife may result in it slipping out and cutting either yourself or someone standing nearby. Never attempt to catch a falling knife. Move your hands out of the way and step back quickly to avoid foot injuries or puncture damage to expensive footgear. To sharpen a knife, use a good-sized whetstone. Place the stone on a nonskid surface and keep your free hand off the stone. Rub the knife on the stone with a back-and-forth motion. Keep your attention on the location of the knife blade.

Knife Guards. Use the recommended guards. Scabbards containing knives should always be hung inside lockers and not outside lockers.

Scabbards. It is best to wear one suspended from a belt. Watch the point of the knife when putting it in the pouch. Never grab at a dropped knife or attempt to defect it with the foot--it is sharp enough to cut through any finger or boot. Do not allow anyone to lay unguarded knives on overhanging beams or ledges.

Tag Fasteners. Although they usually don't cut deeply, tag fasteners can cause the sorest of cuts because of their rough edges. When placing tags in a carcass, it is not advisable to place your fingers through the loop of the fastener. In removing the fastener, you should pull the tag enough to "open" it before removing it from the carcass. Tag fasteners are also referred to as "dead locks."

Slippery Floors. Many of the floor surfaces in your work environment become slippery with blood, fat, tissue fluids, and water as the work progresses through the day. Learn to walk with a "packinghouse shuffle"--extending the hands and arms slightly from the body to provide balance and sliding the feet along the floor to provide maximum traction for each step.

Steam Pipes. The presence of sanitizers means steam pipes near our working areas. Make a survey of your area and require that all steam pipes be covered wherever they might burn hands and legs.

Hooks. "A"-frame offal trucks and sharp tongue hooks should not be too sharp. Do not attempt to walk between tongue and head hooks on the head chain.

Loose Animals. They are not as common as they once were because of the safety fence around the dry landing area, but it could be the rare one that would get you. Allow for this possibility, and have a place of escape picked out ahead of time. Whenever animals are loose on the kill floor, operations should cease until the menace is removed.

Jewelry. Continual exposure to blood, fat, water, tissue fluids, and exudates make it highly impractical for you to wear any personal jewelry while you

are working. Engraved jewelry provides a convenient location of an accumulation of residue and the establishment of contaminating microorganism populations. The lubrication provided by water, fat, blood, and exudates increases the risk of loss of your personal valuables. Finger or wrist jewelry worn near moving machinery increases the risk of loss of fingers or hands as a result of jewelry becoming entangled in the moving machinery.

Firearms. Several beef slaughtering establishments are using rifles and live ammunition. Although the bullets are a fragmentation-type plastic, they will penetrate at a considerable distance after fragmentation. There is the potential danger of being blinded or killed. It has been found that in the case of penetration, there is little hope of removal as the fragments do not show up on X-ray pictures or fluoroscope. Inspectors should see that regular inspection areas are fully shielded from stunning areas where firearms are used.

Cleanliness. Many of the diseased carcasses and parts handled during inspection are potentially a source of infection to you. Some diseases are directly communicable to the person (examples: tuberculosis, actinobacillosis, erysipelas, brucellosis, anthrax, tetanus, and leptospirosis). Various types of infections (some are deadly) are passed through contamination of sores and lacerations. Especially beware of pericarditis, peritonitis, metritis, nephritis, and gangrenous areas. Whenever these are handled, always wash hands in soap and hot water. Avoid unnecessary handling. Open sores should be covered with a waterproof bandage. Most inspectors find that even the smallest cuts become unbearably sore in the blood and dirt of the killing floor unless care is taken to keep them dry. If it becomes necessary for you to wear a rubber or plastic glove to provide temporary protection to a hand wound, always use a surgical-type glove. This type of glove provides protection for your healing wound and is thin enough for you to feel tissue forms and textures through the thickness of the glove.

Antemortem

Inspection. Antemortem should not be attempted without company employee assistance. Inspectors should not enter the pens of wild or unruly animals.

Suspects. When working on suspect animals, let company men restrain them properly before you start your work. Remember that your good example may also result in others being more careful.

Drives. When walking in runs behind animals on drives, beware of a sudden reversal of direction by the animals. They have been known to change direction and run at express train speed only to pile up four or five deep at unopened gates.

Processing and Postmortem

Slippery Floors. Learn to walk with a "packinghouse shuffle"--hold hands out for balance and slide feet along like you are skis.

Stairways. Always use a handrail--if possible, two, if you can reach them. Many bad accidents have occurred on stairs.

Drops. Carcasses occasionally fall here--be alert and be alive.

Doorways and Corridors. It is advisable to walk to the right along corridors or when approaching doorways. When approaching doors operated by hydraulic or air pressure, it is a good idea to have your hand out in front. Iron rings used in trip cords on hydraulic doors are especially dangerous to glasses.

Freezers. Wear sufficient warm clothing. They dry air may not seem so cold but you still are subject to frostbite. You should always have a flashlight when in strange areas--one can hardly realize how dark some of the areas are when the lights go out.

Watching Operations. Stand back out of reach of the "knife slip/" Too much distraction may cause an employee to cut himself. If you must walk close to an individual let him know your intentions. Do not allow company employees to throw material around you.

Power-Driven Trucks. The path of these vehicles is often erratic and their braking power is questionable, so never claim the right-of-way over them. If the establishment has floor-marked power truck lanes, always strictly regard these lanes as reserved for the exclusive use of power trucks and never expose yourself to injury by walking in these lanes.

Barrels and Tierces. They take very erratic courses and are very heavy.

Overhead Structures. Have loose material removed where people walk regularly. In winter, watch for deposits of ice on the outside of buildings.

Ammonia Fumes. They can kill you. Do not stay in enclosed areas when the fumes become sufficiently strong to make your eyes water.

Electricity. Electrical hazards may exist in a plant. Be alert to these potential hazards.

Ultraviolet Lights. These may be installed in special aging coolers to deter spoilage. It is absolutely necessary to wear special goggles to protect the eyes from burns when entering these coolers.

Caustic Cleaners. Care should be exercised wherever there are cleanup operations. Various cleaners are used--some highly alkaline and some highly acid, either of which can burn skin, eyes, or clothing. If you are accidentally splashed with such material, immediately flush the affected area with cold water. The fumes of some of the highly acid or alkaline cleaners become dangerous if inhaled for any length of time.

First Aid. If an accident does occur, notify your supervisor immediately or as soon as possible. He or she will help determine the extent of the injury. In most of the local establishments, inspectors are welcome to use the first aid facilities. If you are sent there, regard it as a privilege and act accordingly.

Medical Care. In case of severe injury, the services of a physician will be available. A list of doctors is maintained by your supervisor; it is a good idea to acquaint yourself with it. An emergency may dictate that the nearest medical doctor be seen.

Accident Reports. Inspector's written report: If practical, this report should be filled out within 48 hours.

Supervisor's report: You will be called upon to give answers for this form soon after the accident. Give good constructive answers as the primary purpose of this report is to help eliminate accidents.

The Safety Committee at your station may also be interested in your version of the accident. It will certainly be interested in your suggestions as to how a repetition of the accident might be prevented.

Carbon Dioxide. Observe safety practices when carbon dioxide is used in humane slaughter or when it is added to product as dry ice for refrigeration. High atmospheric levels of carbon dioxide may be harmful to you.

SECOND DAY

Your trainer will do the following:

1. Have you read the Antemortem material in this step of the EDG.
2. Discuss antemortem inspection procedures.
3. Discuss antemortem ID systems, including use of pen cards, suspect tags, and condemned tags.
4. Have you observe regular inspection personnel perform antemortem inspection.
5. Have you read the Inspection Anatomy material in this step of the EDG.
6. Discuss and review the major organs and structures of an actual carcass.
7. Have you learn the common names of the major organs and structures of a carcass.
8. Have you read the Packing Plant Equipment information in this step of the EDG.

ANTEMORTEM INSPECTION

Introduction

The Wholesome Meat Act requires that animals undergo inspection before they are slaughtered. Consider these reasons why the animals should be examined by an inspector while they are alive.

- To detect diseases and abnormalities that cannot be found using the routine postmortem inspection procedures. (Examples are some poisons, some medicines, and diseases like rabies that affects the nerve tissue.)
- To eliminate contamination of the kill floor from the carcasses and parts of diseased animals that are obviously unfit for human food. (Examples are animals with acute systemic infections, advanced pneumonia, or cancers that have obviously spread throughout the body.)
- To allow the veterinarian to gather the information from the live animal needed to make the correct postmortem disposition of the carcass and parts. (For example, does the animal have a fever? Can it get up and walk? Is it depressed? Does it carry its head off to one side? These questions cannot be answered after the animal is dead.)

Antemortem Procedure

Antemortem inspection consists of examining the live animals, separating those which appear abnormal or diseased, and passing the rest for slaughter.

The abnormal or diseased animals are put in a separate "suspect pen" and examined by the veterinarian.

As in postmortem inspection, antemortem inspection is made up of several components:

- A routine antemortem inspection procedure.
- A facilities, equipment, and plant personnel component.
- A sanitation component.
- A safety component.

The routine antemortem procedure involves several steps:

Check the animal identification system. The animal identification system indicates which lots or pens of animals have been inspected and passed for slaughter and which have not. There are several acceptable ways to assure that all animals slaughtered did undergo antemortem inspection. The most commonly used system involves "pen cards."

A plant employee fills out the top of the card (all except the inspector's signature and the time of day) and places it on the pen of animals to be inspected. A card that is not signed by the inspector indicates that the pen of animals on which it hangs has not been inspected yet.

***EXAMPLE OF A PEN
CARD GOES HERE***

When the pen of animals is ready for inspection, the inspector first checks to see if the number and description of the animals as written on the card corresponds with the number and appearance of the animals in the pen. Then the inspector performs antemortem inspection.

The Routine Antemortem Inspection Procedure. There are several acceptable procedures. Your trainer will show you the one used at this plant. The procedure described below is the "regular" procedure. An alternate procedure and a procedure for delayed postmortem will be covered by your trainer.

The inspector examines the animals while they are "at rest" in the pen. Next the animals are driven slowly in one direction while the inspector observes one side; then the animals are driven slowly back so the inspector can observe the other side. Under certain circumstances a mirror may be used to view the opposite side of each animal.

***REGULAR ANTEMORTEM INSPECTION PROCEDURE
GOES HERE***

Segregation of Abnormal Animals. The inspector indicates any abnormal animals to the plant employee assigned to move the lots, and this plant employee separates the animals indicated and puts them in the special "suspect pen."

Adjustment of the Pen Card. The total number of animals in the pen or lot is adjusted to reflect the removal of any abnormal animals. Then the inspector signs the pen card and notes the time of day. When you see a pen card that has been signed by the inspector you know that the animals in the pen have been inspected and passed for slaughter and what time of day the inspection took place.

When the first animals from the pen are driven up to the kill, the pen card is delivered to the designated postmortem inspector. By checking for the antemortem inspector's signature and the time of antemortem inspection, the postmortem inspector knows that these animals have undergone antemortem inspection and have been passed for slaughter. Follow the procedure in the diagram.

DIAGRAM GOES HERE

In addition to the pen card, there may be some other forms and certificates that go with a lot or pen of animals. These vary from species to species, state to state, and sometimes even county to county. Examples are shipping permits, brucellosis reactor forms, and experimental animal certificates. Your supervisors at the plants to which you are assigned will tell you which forms and certificates are used and what is done with them. The regulations pertaining to these papers are discussed at the classroom sessions.

**Facilities
And Equipment**

Some examples of facilities and equipment are:

- Enough pens to hold the animals.
- A separate "suspect pen."
- Adequate lighting
- Cleanup facilities and equipment.
- Areas to hold feed, etc., as needed.

The actual facilities and equipment at any particular plant vary with the nature of the operation. For example, lighting. If antemortem inspection takes place during the daylight hours in open areas, supplemental lighting is usually not needed. However, if antemortem inspection is performed in covered areas, light fixtures are used to provide the necessary illumination.

Sanitation

The facilities and equipment used must be kept clean. The guidelines for establishing what "clean" is will be covered in the classroom lectures. Again, there are minor variations depending on the particular circumstances at the plant in question. Your supervisor provides you with this kind of information when you go to a new plant.

Safety

Last, but not least, is the safety component. Cattle are big and strong; when they are frightened, beware of them. Hogs are not gentle if aroused either. Review the AM safety tips in the Safety Section (Page B.4.3). And be cautious even if you are experienced in handling cattle and swine.

**Identifying
Abnormalities**

How do you tell if an animal is abnormal? Where do you look? What will you see? Hear? Smell?

WHERE DO YOU LOOK? DIAGRAM GOES HERE

First it helps to know the normal characteristics of the animal you are inspecting. Then try learning the symptoms of the common diseases and abnormalities that the animals can get. These symptoms are similar to those found in sick people.

Examples of abnormal variations:

1. Downers--cannot get up.
2. Crippled--moves with a limp.
3. Depressed--head hangs, not interested in surroundings.
4. Discharges--from the eyes, nose, and other body openings.
5. Coughing, wheezing, snorting, rapid heavy breathing.
6. Reluctant to move.
7. Moves abnormally in circles, wobbly, weak, chews, scratches.
8. Abnormal lumps or growths.
- Many more.

Normal variations and abnormal conditions are treated in more depth in the classroom.

**Antemortem
Records**

After the slaughter operations have ended, a plant employee gives the total numbers of animals slaughtered to the inspectors. The inspectors use this information, and that on the pen cards, to complete the "Antemortem Summary" daily.

This form is used to keep records on condemned animals and on suspects sent to slaughter or held over until the next day. The suspect and condemned animals have metal tags, serially numbered, placed in their ear for identification. (See drawing on the next page.) the numbers on these tags are recorded on the antemortem forms. The "Suspect" metal ear tag is silver and the "Condemned" metal ear tag is red. Your trainer will discuss the methods used at this plant.

***METAL "SUSPECT" OR "CONDEMNED" TAGS PLACED IN THE EAR
DIAGRAM GOES HERE***

INSPECTION ANATOMY

Introduction

You know quite a bit of anatomy. Much of this information will be just a review. Most new inspectors know about the parts but do not know the packing house terms. Concentrate on learning the names of the common parts. There may be two or three names for each part--a medical name, a packing house name, and a common name. Know them all. Also, relate the name and the structure two ways.

1. Given the name, you locate the part. For example, "Where is the shank?"
2. Given a part, you name it.

Read the following material and study the terms and relationships. Your trainer will demonstrate the structures on the actual carcasses and parts.

The words in this part are just a beginning. More inspection-related terms will be introduced in the section on inspection. These terms are introduced first to help you communicate more easily with the inspectors in the plant.

For example:"The hepatic lymph nodes are located on what structure?"

Answer: "The Liver."

If you know what the liver is, with very little more information (what do lymph nodes look like?), you could identify the hepatic lymph nodes on an actual specimen.

These inspection-related anatomical terms are important "tools of the trade." An inspector should be able to describe the abnormalities found in terms of what is seen, felt, or smelled. (For example--"The liver, kidneys, and intestines are dark and full of blood," or--"There was a runny pus in the heart sac that escaped during evisceration.") In addition, these words must be understood in order to interpret the MPI Regulations, the Manual, and Directives.

Concentrate on learning basic terms, pathology, and actions taken.

On the kill floor, carcasses are suspended by their hind legs, making them upside down compared to how you are standing. Study the following diagrams indicating the major points of surface anatomy.

SURFACE ANATOMY DIAGRAM GOES HERE

**Species
Differences**

The organs look different in the different species (cattle, swine, sheep, etc.). For example, a hog kidney looks like a human kidney, but a cattle kidney is "knobby."

Also, cattle have a huge stomach divided into four parts. Swine have a much smaller stomach, similar to ours. Expect the organs in different species to look different.

**The Internal
Organs (Viscera)**

The internal organs are contained in the various body cavities. The two largest cavities are the thoracic cavity, containing the lungs and heart; and the abdominal cavity, containing the digestive organs among others. Separating these two cavities is the diaphragm. The entrance to the thoracic cavity is through the nose and mouth, then down the neck to the chest. The exit from the abdominal cavity is by way of the pelvic canal, an irregularly tube-shaped cavity formed by the ring of bones making up the pelvis. Food animals are built much as you are, so use yourself as a model when learning the various structures and relationships.

COW DIAGRAM GOES HERE

The thoracic cavity contains the lungs and heart. The trachea leads from the nose to the bronchial tubes, which carry the air into and out of the lungs.

Also passing through the thoracic cavity is the esophagus, the passageway for food to the stomach.

Identify these structures on the following diagram.

COW DIAGRAM GOES HERE

The abdominal cavity contains, among other structures, the stomach and intestines, liver, spleen, and kidneys. There are other structures of importance to inspection in the abdomen, but learn these five first.

COW DIAGRAM GOES HERE

(Remember, these pictures are diagrammatic representations of the real organs, and are not necessarily meant to look like the real structures.)

The same structures in an animal hanging by its hind legs would appear as follows.
Examine the following series of diagrams.

COW DIAGRAM GOES HERE

COW DIAGRAM GOES HERE

**Other Abdominal
Structures**

Caul Fat. A sheet of fat around the other organs. A packinghouse term. It's medical name is OMENTUM.

Urinary Bladder. By the pelvic canal.

Bung. A packinghouse term for the rectum, anus, and urethra (tube from the bladder) in the pelvic canal.

Uterus. Reproductive organ of female animals.

These items are much more easily demonstrated than they are diagrammed or described in words. Learn the four names now and observe the structures as they are demonstrated by your trainer.

Evisceration

In order to be removed, the viscera must either be pulled or cut from *its attachments to the body*. The main areas of attachments are:

1. In the *pelvic canal* (the end of the digestive tract).
2. Along the *backbone*.
3. In the *neck* (the beginning of the digestive tract and the windpipe).
4. The diaphragm muscles between the abdominal and chest cavities.

The butcher uses a combination of cutting and pulling to break these attachments.

ATTACHMENTS DIAGRAM GOES HERE

On the following pages are some diagrams. Learn the names and locations of each labeled part. Don't hesitate to ask your trainer if anything is not clear to you!

A list of diagram titles:

1. Cattle Carcass Outside
2. Cattle Carcass Inside
3. Cattle Lungs and Heart
4. Cattle Abdominal Viscera
5. Swine Carcass Outside
6. Swine Carcass Inside
7. Swine Viscera

1. CATTLE CARCASS-- OUTSIDE DIAGRAM GOES HERE

2. CATTLE CARCASS--INSIDE DIAGRAM GOES HERE

3. CATTLE LUNGS AND HEART DIAGRAM GOES HERE

5. SWINE CARCASS--OUTSIDE DIAGRAM GOES HERE

6. SWINE CARCASS--INSIDE DIAGRAM GOES HERE

7. SWINE VISCERA DIAGRAM GOES HERE

**Swine Anatomy
Checkpoints**

Are you sure that you can identify all the following structures?

Swine Carcass.

1. **Joints.** Hock, stifle, knee, elbow, shoulder.
2. **Cavities.** Abdominal, thoracic, pelvic canal, neck.
3. **Linings.** Pleura, peritoneum.
4. **Areas.** Ham, picnic, lumbar area (inside the backbone and on the outside of the carcass), jowl, flank fold.
5. **Bones.** Sternum, cut surface of the spinal column (backbone), aitch bone.
6. **Other.** Kidney and its capsule, diaphragm and its pillars.

Swine Viscera.

1. **Thoracic Viscera.** Lungs, trachea (windpipe), heart, pericardium.
2. **Abdominal Viscera.** Esophagus (weasand), stomach, small intestine, cecum (blind gut), large intestine, rectum, anus, bung, urinary bladder, urethra (pizzle in the male), uterus (in females only), liver, gall bladder, spleen (melt), caul (omental) fat.

**Cattle Anatomy
Checkpoints**

Are you sure that you can identify all the following structures?

Cattle Carcass.

1. **Joints.** Hock, knee, elbow, shoulder, stifle.
2. **Cavities.** Abdominal, thoracic, pelvic canal, neck.
3. **Linings.** Pleura, peritoneum.
4. **Areas.** Round, chuck, brisket, neck, lumbar area (inside the backbone and on the outside of the carcass), flank fold.
5. **Bones.** Sternum, cut surface of the spinal column (backbone), aitch bone.
6. **Other.** Kidney and its capsule, diaphragm, and its pillars.

Cattle Viscera.

1. **Thoracic Viscera.** Lungs, trachea (windpipe), heart, pericardium.
2. **Abdominal Viscera.** Esophagus (weasand), rumen, reticulum, small intestine, cecum (blind gut), large intestine, rectum, anus, bung, urinary bladder, urethra (pizzle in the male), uterus (in females only), liver, gall bladder, spleen (melt), caul (omental) at.

PACKING PLANT EQUIPMENT

Introduction

The equipment pieces mentioned in this part will be, as much as possible, in the order that they are used during the slaughtering process. In some parts of the process the order of the different operations (and therefore the order of the different pieces of equipment used) may vary from what you see at this plant. Also, some pieces of equipment, particularly knives, saws, sanitizers, and cleanup equipment, are used in many different places in the process. These are listed at the end of the equipment outline for the species.

The names of some of the pieces of equipment very aptly describe their appearance and use. These pieces will not be described in detail. Other pieces of equipment have names that give you absolutely no clue as to what they look like or what their function is. Concentrate on learning the names and uses of these items.

Since this part is not intended to be complete, you may see equipment not mentioned. Also, some of the items mentioned may not be available for you to examine. You may, however, want to take notes about equipment at your duty station that is not included in this part, and note different designs of the items that are listed.

Your trainer will describe the equipment in use at this plant. An on-the-spot discussion is often a more effective method of learning about equipment than reading about it, since much of it is difficult to describe in words. Also, many plants ingeniously design or modify equipment so that it particularly fits their own needs. Inspectors assigned to a new job make a point of examining the equipment they are to monitor as part of their duties so that they will be able to evaluate its performance effectively.

Cattle Slaughter Equipment

FUNCTION		EQUIPMENT USED TO PERFORM THE FUNCTION
1	Moving live cattle to the knocking box.	Stock Prod. Usually electrical; keep out of the way of this instrument.
2	Removing flies from the backs and faces of live cattle.	A fly-spray device. Spraying is done outside the kill floor just before the cattle enter the knocking box. The fly-spraying chemical must be approved.
3	Stunning (except ritual slaughter).	A stunning device. There are several different kinds. (Note here the type used at this plant).
4	Hoist the stunned carcass.	A hoist with chain to warp around the hind legs
5	Stick	<p>Knives. Examine several different shapes and sizes. Note the presence or lack of safety features.</p> <p>DIAGRAM GOES HERE</p> <p>DIAGRAM GOES HERE</p>
6	"Drop" the head.	
7	Skin the head.	

FUNCTION		EQUIPMENT USED TO PERFORM THE FUNCTION
8	Identify the head with its carcass.	Identically numbered tags --one attached to the head and one attached to the carcass, usually the brisket.
9	Remove the head.	Knife.
10	Dehorn the head.	A dehorning device --from a saw to an automatic air-powered machine. Note what is done at this plant.
11	Trim and clean the head.	Knife, head-washing cabinet. <p style="text-align: center;">DIAGRAM GOES HERE.</p>
12	Hold heads for inspection.	Head rack. <p style="text-align: center;">DIAGRAM GOES HERE.</p>

[illegible]

FUNCTION		EQUIPMENT USED TO PERFORM THE FUNCTION
14	Rodding the weasand.	<p>Weasand rod--loosens the tissue connections between the weasand (esophagus) and the neck tissues from the head end to the thoracic cavity.</p> <p><i>DIAGRAM GOES HERE</i></p>
15	Bed dress.	<p>A "bed" with a "pritch plate" and a "pritch stick" to prop the carcass on its back</p> <p><i>DIAGRAM GOES HERE</i></p> <p>--or a cradle--a device with sides to prop the carcass upon its back.</p> <p><i>DIAGRAM GOES HERE</i></p>

FUNCTION		EQUIPMENT USED TO PERFORM THE FUNCTION
16	Rail dress.	<p>Hooks and rollers. The hind feet are removed, the hocks skinned back, a hook is placed in the hock, and the roller placed on the overhead rail</p> <p><i>DIAGRAM GOES HERE</i></p>
17	Skinning.	Knives or pneumatic (air powered) dehiders-hide pullers--several different types.
18	Removing the hide from the kill floor.	<p>Hide chute.</p> <p><i>DIAGRAM GOES HERE</i></p>

FUNCTION		EQUIPMENT USED TO PERFORM THE FUNCTION
19	Splitting the brisket.	Saws or cleavers.
20	Hoisting the carcass, which is on the bed.	A hoist and hooks with rollers.
21	Cutting the rectum and urethra loose from the pelvic canal tissues (reaming the bung).	Knife. <i>DIAGRAM GOES HERE</i>
22	Tying the bung.	String or twine. The tie includes both the rectum and the urethra to prevent leakage of both rectum and urinary bladder. <i>DIAGRAM GOES HERE</i>

FUNCTION		EQUIPMENT USED TO PERFORM THE FUNCTION
23	Skinning the tail.	Tail clamp. (Some operations do not use these).
24	Evisceration.	Knife. Viscera placed on a viscera truck or a moving (flight top) table.
25	Tying intestines and weasand near paunch if necessary.	<p>String or twine. The ties are made to prevent the leakage of content if the different digestive tract parts (tripe, weasands, casings) are saved as food.</p> <p><i>DIAGRAM GOES HERE</i></p>
26	Splitting the carcass into sides or halves.	Saw.
27	Scribing the carcass.	A scribing saw. A cut is made along the vertical parts of the backbone. Your trainer will describe this operation.
28	Weighing the carcass.	Weigh scales.
29	Washing the carcass.	High pressure hoses. (Wash from the top down).
30	Pinning the neck.	<p>Wooden neck pins--a pointed stick that helps shape the neck.</p> <p><i>DIAGRAM GOES HERE</i></p>
31	Shrouding the carcass.	Shrouds and shroud pins --large pieces of cloth wrapped around the outside of the carcass halves and attached with metal shroud pins. Your trainer will show you this operation, plus the shroud tank and shroud solution.
32	Cleaning and trimming the inspected and passed viscera (hearts, livers, spleens, etc.).	<p>Tables with drains, running water, suitable pans, and racks, etc.</p> <p>Your trainer will demonstrate these pieces of equipment.</p>

FUNCTION		EQUIPMENT USED TO PERFORM THE FUNCTION	
33	Preparing tripe, caul fat, weasands, etc.	A paunch table A tripe umbrella A tripe scalding Various barrels and racks Your trainer will demonstrate these operations.	#1 #2 #3 #4
<p><i>DIAGRAM GOES HERE</i></p>			

FUNCTION		EQUIPMENT USED TO PERFORM THE FUNCTION
34	Preparing tongues.	Rack.
35	Boning heads.	Table with running water, Cheek meat puller, Jaw puller, Various pans and barrels. Your trainer will demonstrate these operations.
36	Preparing brains.	Head splitter (saw or cleaver) pans
37	Cleaning and sanitizing hand tools.	Lavatories, sanitizers
38	Cleaning and sanitizing large pieces of equipment	Separate areas for cleaning and sanitizing racks, pans, viscera trucks, barrels, etc.
39	Cleaning and sanitizing stationary equipment (moving tables, head chains, etc.).	Cleaning and sanitizing devices that continuously clean the direct product surface parts of the equipment.
40	Other. Add notes here.	

**Swine
Slaughter
Equipment**

Some of the swine slaughter equipment is similar to the cattle slaughter equipment. In these cases, a description of the item will not be repeated. Check in the Cattle Slaughter Equipment Section for details about these items.

FUNCTION		EQUIPMENT USED TO PERFORM THE FUNCTION
1	Moving the live hogs to the restraining device.	Similar to cattle.
2	Restraining the hog for stunning	A squeeze chute --usually electrical. The sides of the chute move toward the hog to hold it still for stunning. There are several different types of chutes available commercially.
3	Stunning the live hog.	A stunning device --often electrical. The stunner causes a current of electricity to pass through the head of the hog, rendering it unconscious. Another method of causing unconsciousness in the live hogs is the carbon dioxide gas tunnel. When the gas tunnel is used, a restraining chute and electrical stunning are not necessary. There are also several other acceptable methods of stunning. All methods are discuss in depth at the training center. Your trainer will show you the method of stunning used at this plant.
4	Sticking	A knife . The major blood vessels leading from the heart to the head are severed. See the Cattle Slaughter Equipment description for an illustration.
5	Bleeding.	A conveyor belt --with a means to confine the blood. The stunned and stuck hogs lie on the moving conveyor belt. There are also other acceptable arrangements for bleeding. Your trainer will show you the equipment used at this point.
6	Skinning instead of dehairing	Swine may be skinned like cattle.
7	Dehairing	There are many methods available to remove the hair from the skin of swine. Some of the more common methods are described here. They are used in various combinations in the different plants.
	Loosening the hair.	A scald vat--a large tub of hot water to which hair-loosening chemicals may be added.
	Removing the hair.	A dehairing machine--a large machine with rotating paddles inside to pull the loosened hair off the hogs.

FUNCTION	EQUIPMENT USED TO PERFORM THE FUNCTION
7 (cont)	Up to this point, in plants that use a scald vat, the swine carcasses are not yet suspended from an overhead rail. At this point in the dressing procedures, these plants usually do hang the carcasses by their hind legs from a rail. The process of hanging a hog carcass up by its hind legs from an overhead rail is called gambrelling .
	Suspending the carcass by its hind legs from an overhead rail.
	A gambrelling table and gambrels . A cut is made in the back of each hind leg under the tendons and the gambrel is inserted. Then the gambrel is hooked to a trolley riding on the overhead rail. Follow the procedure in the diagrams.
	<p style="text-align: center;"><i>HOG ON THE GAMBRELLING TABLE DIAGRAM GOES HERE</i></p>

FUNCTION		EQUIPMENT USED TO PERFORM THE FUNCTION
7 (cont)	Other dehairing methods.	<p>A rosin dip A polisher A singer (pronounced <i>sin-jer</i>) Shavers (plant employees using knives and other devices to scrape and shave the carcasses).</p> <p>Your trainer will explain about the dehairing methods used at this plant.</p>
8	Cleaning the outside of the carcass before any cuts are made into the carcass tissues (except for the stick hole for bleeding).	A washing (rinsing) cabinet --with jets of water under pressure to rinse off any remaining loose hair and dirt.
9	Removing the tissue between the toes.	A knife . (This operation may be performed later in the plant's dressing procedure.)
10	Removing the eyelids.	A knife . (This operation may be performed later in the plant's dressing procedure.)
11	Removing the ear canals.	A knife . (This operation may be performed later in the plant's dressing operation.)
12	Removing the horn part (toenails) of the feet.	A toenail puller . A device designed for this job. (This operation may be performed later in the plant's dressing operation.)
13	Dropping the head.	A knife . The head is "dropped" or cut loose from the neck by cutting through the tissues at the junction of the neck and head. The joint between the neckbones and skull bones is severed. The head may be removed completely from the carcass at this point, or left hanging from the carcass by one jowl. See the Cattle Slaughter Equipment description for an illustration of the location of the head dropping cut.
14	Eviscerating	Knives, cleavers, and saws as necessary. The procedure used to eviscerate swine is similar to that used to eviscerate cattle. You can review the eviscerating procedure in the Inspection Anatomy and Cattle Slaughter Equipment descriptions. Some differences between cattle and swine evisceration are (but not necessarily) a. "ties" are usually not used in the swine evisceration procedure, and b. the swine viscera, including both the abdominal and thoracic contents, are removed in one piece, and the various parts are not separated before viscera inspection as they usually are in cattle.

FUNCTION		EQUIPMENT USED TO PERFORM THE FUNCTION
15	Presentation for inspection of the head and viscera.	A moving-top table with pans . The sets of viscera are placed uniformly in the pans by the plant employees. If the head is removed completely from the carcass, it is placed in its own separate pan beside the set of viscera from the same carcass.
16	"Popping" the kidneys.	A knife . A plant employee removes the capsule from the kidneys before carcass inspection.
Now the carcass is ready for carcass inspection.		
17	"Trimming" the "stick hole."	<p>A knife. The edges of the skin around the stick hole (the knife cut to bleed the hog) have been contaminated by prior cleaning and dressing procedures. The contaminated tissue is removed by a plant employee while the carcasses are still on the kill floor.</p> <p>A neck washer. A device that removes blood clots from the stick wound up into the neck tissues.</p>
18	Other dressing operations that may be performed while the carcasses are still on the kill floor (before chilling).	<p>The following plant dressing operations are optional and may or may not be performed in any combination by the swine packing plants.</p> <ul style="list-style-type: none"> • Facing the hams • Skinning the carcass • Pulling the leaf fat • Splitting the carcass • Removing the kidneys • Removing the tail • Removing the front feet • Weighing the carcass • Washing the carcass • Removing the jowls <p>Your trainer will show you what operations are performed at this plant and what equipment is used by the plant employees to perform these activities.</p>
19	Cleaning and trimming the "inspected and passed" viscera and preparing parts for use as animal food.	Tables with drains and running water suitable barrels, pans, racks, knives, etc. This equipment is used to prepare the hearts, giblet meat, caul fat, spleens (melts), livers, stomachs, and casings for human consumption. Not all plants save all the possible visceral parts for use as human food. Condemned and inedible parts selected for use as animal food must be handled in an acceptable manner and have their own separate and appropriately marked equipment. Your trainer will show you what is done at this plant.

FUNCTION		EQUIPMENT USED TO PERFORM THE FUNCTION
20	Preparing the edible head parts from "inspected and passed" heads.	Similar to cattle equipment. Parts often prepared by the plants for use as food products are tongues, cheeks, ears, snouts, head trimmings, and brains. Your trainer will show you the equipment used at this plant.

THIRD DAY

Your trainer will do the following:

1. Have you read the Methods of Postmortem Inspection material in this section of the EDG.
2. Discuss cattle postmortem inspection procedures in detail.
3. Review the lymph nodes that are routinely palpated or incised during postmortem inspection.
4. Discuss why the tissues are inspected and why no step in the inspection procedure may be omitted.
5. Demonstrate correct cattle postmortem inspection procedures.
6. Have you practice cattle postmortem inspection procedures.
7. Determine if you are performing cattle postmortem procedures correctly.
8. Have you read the Identification Systems and Records material in this step of the EDG.
9. Discuss kill floor identification systems.
10. Discuss the use of tags, brands, seals, and other means of identification used to keep control of product and processes.

METHODS OF POSTMORTEM INSPECTION

Introduction

How do you detect diseases, abnormalities, and contamination? Primarily the five physical senses are used. These are:

- **Sight.** Observing [seeing a disease lesion (bruise, abscess, etc.)].
- **Feel.** Palpating (feeling an abnormal lump in the tissues, feeling the grinding of broken bones, feeling the abnormal firmness of a "nutmeg" liver.
- **Smell.** Smelling (smelling urine odor in uremia, smelling onion odor, smelling the contents of a broken abscess).
- **Hearing.** Listening (hearing a carcass fall).

Lymph Nodes

In order to detect diseases and contamination with your senses, you have to look in the right place. Where is the "right" place? Diseases, abnormalities and contamination can occur anywhere in the carcasses and parts. However, diseases and abnormalities are most likely to produce visible or palpable lesions in certain specific locations. Of primary importance in organoleptic (use of the senses) detection of disease is the lymphatic system. The lymphatics consist of invisible vessels throughout all tissues which lead to grossly visible lymph nodes. Lymph nodes range in size from just visible to 3 to 4 inches across.

Their appearance has been variously described as "egg-shaped" to "cigar-shaped" to "spherical." All these shapes can be normal. The consistency (firmness) is between that of warm fat and muscle. The color ranges from grey-brown to fat-colored. Some have light and dark markings. The normal range of appearances is wide depending on the age of the animal, breed, species, and location in the body. The best way to learn "normal" is to look at all the lymph nodes you can under the direction of a trainer who explains about the particular lymph nodes you see. Written descriptions, pictures, and diagram will not replace experience with the real thing.

EXAMPLES OF LYMPH NODES DIAGRAM GOES HERE

Lymph nodes function as filters for disease microorganisms and abnormal or toxic chemicals in the tissue fluids of the body. An example you may have seen is "blood poisoning" in a hand or finger of a person. Red streaks that are not blood vessels become visible p the arm and a lump, with swelling and pain, develops in the armpit. The red streaks are inflamed lymph vessels (normally invisible) and the lump is formed by the inflamed proper axillary lymph nodes. Under the skin you can see the redness and enlargement of the nodes. When diseased organisms or toxins begin to spread around the body, the lymph nodes are among the first tissues to become visibly affected. This is the inspector's signal that something is wrong.

LYMPH NODE DRAINAGE DIAGRAM GOES HERE

The major lymph nodes are located in specific places and the fluids draining through their filter mechanism come from specific areas of the body.

LYMPH NODE DIAGRAM GOES HERE

The veterinarian thoroughly examines the carcasses and parts retained by the inspectors. The lymph node and tissue responses found during these detailed examinations indicate the location and severity of the condition, and whether or not the disease has begun to spread around the animal's body.

By evaluating these and the antemortem findings, plus laboratory results if necessary, the veterinarian determines the acceptability of the carcass and parts for human food.

Some lymph nodes and tissues need to be incised so that the internal portions can be observed. The incision technique is critical.

First, the cut edges must be smooth, not ragged or torn. Otherwise the lesions of certain important diseases are difficult to detect. Lymph nodes, when incised, are sliced like a dinner roast of meat--thin parallel slices that expose the body of the node. Tuberculosis lesions, some abscesses, and other conditions are exposed by incision of lymph nodes. The wrist-rolling motion permits the inspector to observe both sides of each slice.

INCISION TECHNIQUE DIAGRAM GOES HERE

INCISION TECHNIQUE DIAGRAM GOES HERE

It takes practice to master the correct incision technique. Time to practice on actual tissues has been allotted in the postmortem inspection part.

**Postmortem
Inspection in
General**

Postmortem inspection is divided into:

- Head inspection
- Viscera inspection (of the internal organs).
- Carcass inspection.

In large plants and fast operations, inspectors are assigned to one of the three inspection sites. They switch from site to site according to a rotation pattern to maintain skill at all the different procedures. How often the switches are made varies from plant to plant depending on the rate of slaughter, number of inspectors, other duties performed, kill layout, etc. In smaller plants with a slower kill, one inspector may do all three inspection procedures on each animal. At each inspection site the inspector performs a specific inspection routine--a sequence of incising, observing, and palpating the tissues that is the fastest, safest, and most sanitary way to examine all the required tissues without overlooking anything. Minor variations in the inspection routine may be approved by your supervisor to account for differences in facility layouts and in people (left-handedness, for example). No step in the inspection routine may be omitted. All steps are essential to detect the abnormalities and diseases that may occur at any time!

The inspection routines differ for each inspection site in each species. These differences reflect the variations in anatomy, diseases, and method of dressing between the species. Also, there may be several acceptable "methods of presentation" of the tissues to be inspected. Inspectors are expected to be able to recall from memory the inspection routines they use, and know where to find the descriptions of all the routines in the Meat and Poultry Inspection Manual.

IDENTIFICATION SYSTEMS AND RECORDS

Introduction

Have you noticed all the methods of product identification as you study the plant and inspection activities? Both the plant employees and the inspectors use these identification methods to keep control of products and processes.

"Control" has three aspects:

- How much?
- Of what?
- In what condition or state?

For example:

How much?-----6		-200 pounds
Of what?-----cars	or	-beef
In what condition?-----used		-boneless

The methods used to identify the product should provide information on all three of these aspects. Then, by comparing "before and after" record, the whereabouts and status of the products can be ascertained.

In slaughter operations, there are many identification systems to control all three aspects of production. "How much" is measured and recorded in pounds, numbers of items, number of boxes, or in other units as called for by the recording procedure. "What" refers to the identity of the product; for example, cattle livers, head meat, cheeks, tripe, rounds, etc. Many of the industry terms used to name the various products are explained in other parts. You will learn them as your training progresses.

Product Status

The "status" or "state" of products in slaughter operations can be described in many different ways. The status of the product with regard to its acceptability as human food is the description referred to in this part. The states of product are as follows:

1. Inspected and passed (no restrictions).
2. Inspected and passed with restriction.
3. Inspected and retained for further examination.
4. Inspected and condemned.
5. Inedible.

In general, *inspected and passed* (without restriction) product is free to flow through the plant's process by which it is prepared for sale to consumers. Products that are *inspected and passed* with restriction must be treated or handled in a manner that causes the restriction to be removed by an inspector.

The inspectors keep a close check for the amount and whereabouts of this type of product until it is acceptably treated or handled to remove the restriction. An example is "Passed for Cooking." The inspectors mark products "Passed for Cooking" so that they can easily be differentiated from similar products passed without restriction. The identification of the restriction is not removed until the inspector determines that the product has been acceptably cooked.

Product Identification

Basically there are the following kinds of product identification methods:

- Tags affixed to the product.
- Dyes and chemicals applied to the product.
- Specific products placed in designated containers or locations.
- Marking and branding.
- Labeling.

Both the methods used (including any tags, chemicals, brands, or marks) and the way in which the methods are used are approved by Meat and Poultry Inspection officials. Many procedures and devices used by inspectors are standard throughout the nation so that inspectors moving from plant to plant around the country will know the status of any product in any plant. In addition to the standard systems, plants often have their own internal record and identification systems to facilitate their operations. These are generally very helpful to the inspector too.

While you are in a plant, it will help you to follow the different product identification systems from their beginning to end. Brief descriptions of each, emphasizing the key points of the method, follow:

Tags. There are two types of tags--those supplied by the plant and those supplied by inspection. Some examples of those supplied by the plant are:

1. Pen cards (the use of which is described in the Antemortem Section of this guide, B.5).
2. The numbered tags placed on the head and carcass of cattle immediately after slaughter. (These "government numbers" or "house tags" are used to tell which head belongs to which carcass after the head is removed.)
3. Weight cards--on which the plant records the weight and other information of dressed carcasses. These are usually attached to the carcasses by the plant employees after weighing and before chilling.

Examples of tags supplied by inspection are:

1. The small Retain "gang" tags. The 4-section tag may be used as a 2-section or 4-section tag. The 4-section tag may be separated into two 2-section tags. The two sets can be differentiated by the suffix letter on two of the tags. When the tag is used as a 2-section tag--sheep, goats, calves, and swine--record the number as it appears with or without the suffix letter as appropriate. When the tag is used as a 4-section tag--cattle, horses, and other equine--record the number without the suffix letter.

SMALL RETAIN "GANG" TAGS DIAGRAM GOES HERE

2. The large combination Retain-Reject tag.

- Check REJECTED for equipment.
- Check RETAINED for product.
- Fill out the particulars.
- Fill out the "stub."
- Attach the tag--remove the stub. The stub is the inspection record.

LARGE COMBINATION RETAIN-REJECT TAG DIAGRAM GOES HERE

The postmortem inspectors use the gang tags to identify those carcasses and parts to be retained for examination by the veterinarian. When a diseased carcass is detected, the inspector attaches one section of the gang tag to each separate part of the carcass. Then these parts are moved to a separate area, the carcass disposition area, for the veterinarian to examine. When more than one carcass is retained, the veterinarian tells which parts belong together by the identical numbers on the gang tag sections.

DISEASED CARCASS AND PARTS RETAINED DIAGRAM GOES HERE

Dyes and Chemicals. Dyes and chemicals are added to freely slashed inedible and condemned material as necessary to give it the appearance of being obviously, by sight, smell, and taste, not intended for human food. Control over inedible and condemned material is necessary to assure that it cannot move into edible product channels. Slashing the designated inedible and condemned material freely, and liberally applying some unusually (for meat) colored and disagreeably smelling chemical, imparts obvious characteristics of unwholesomeness. More information on this process is in the Inedible and Condemned section.

Specific Products Placed in Designated Containers or Locations. Another method used by packing plants to identify the status of products is placing them in specified containers and locations. Again, these procedures must be approved by FSIS and many are standard across the nation.

Examples of nationwide standard container markings and locations include:

1. Marked inedible and condemned containers (often handtrucks or barrels). See the Inedible and Condemned section for more information on these containers.
2. "Retain cages"--designated locations, capable of being locked or sealed, in which the items retained by the inspectors may be placed. The "cage" is locked or sealed by the inspectors so that no item inside may be removed without detection.
3. "Returned goods" area. Items returned to the establishment are placed in designated areas until they are examined by an inspector. More information on (2) and (3) is in the Allied Departments section of this guide.
4. Carcass disposition area--a separate location on the kill floor in which carcasses and parts retained by the postmortem inspectors are placed for veterinary review.
5. The tanking area. Items that are put into the tank room are not permitted back into any edible product area, including the kill floor. Inspectors seeing meat or offal being taken from the tank room to the kill floor would immediately know something is wrong!
6. The "suspect pen"--a designated and marked pen in which live animals showing abnormalities are placed for veterinary review. More information on this is included in the Antemortem section of this guide, B.5.
7. Designated areas in coolers and freezers. Areas are set aside in coolers and freezers for the chilling or freezing of animal food, the treating of restricted products, and the holding of sample units from statistical sampling procedures as needed.

Marking and Branding. The application of information to carcass and parts or their containers by a brand or mark is a fast, distinctive, and relatively durable method of identification. Federal inspection marks are standard nationwide and are designed to convey information about the status of the product. In addition, some marks identify the federally inspected plant at which the item was last processed.

The regulations governing the use of inspection marks are detailed and specific to avoid misinterpretation of their message. For example:

1. All official federal inspection "marks" (including words, numbers, and designs) are approved by FSIS officials before use by the plant employees.
2. Which official mark and where it is used also is approved by FSIS officials before use.

3. The definitions of what comprises an "official mark of inspection" are very specific. During the pre-class phase of training, learn what kinds of marks there are and what they look like. The following is a listing of some of the official marks and in general what they mean when applied to a product.
 - a. "U.S. INSPECTED AND PASSED"--applied to the surface of fresh meat and edible byproducts. It means that the items so marked have been inspected (and possibly reinspected one or more times) and found to be wholesome at the time the marks was applied. The mark is a circle containing abbreviated words and a number.

The number is the "Establishment number." Each federally inspected plant has a different number. The plants to which each number has been assigned are listed in the "Directory." If you look up No. 38, however, you will find "(Reserved for illustrative purposes)." There is no Establishment No. 38. The number is used for publicity and educational purposes. All inspected and passed products are required to have the "Est. No." in a specific location on them or on their containers before they leave the official premises of the plant on their way to consumers.

The "U.S. INSPECTED AND PASSED" mark is applied directly to product surfaces by one of several different methods depending on the type of item. Though there are exceptions to them, the following generalities will guide you as you begin learning. The details are discussed in class.

- (1) Marks applied directly to meat and edible byproducts. If meat or edible byproducts have the mark applied directly on them, it is applied with a brand.

BRAND DIAGRAM GOES HERE

Brands are usually made of metal and come in three official sizes. Each size is used on specific items. Most brands are dipped in a an approved food grade dye (called "ink" in the plants) before application to the item. The "ink" forms the visible mark. There are also burning brands, hot ink brands, and rubber brands. Hot brands are often used to apply the mark to items with slick or irregular surfaces such as hearts, livers, and tongues.

- (2) Marks on containers. Except for the "kill floor brand" on the carcasses, few inspected and passed meat or meat byproduct items are required to be marked directly. The plant personnel decide, with FSIS approval, whether it is best for them to mark the items or the containers into which the items are placed. Unmarked items must have marked containers. (It's acceptable to put marked items in containers too.) The plants usually decide to use marked containers for items that are too numerous, too small, or too irregular to mark clearly. The "U.S. INSPECTED AND PASSED" mark on containers looks like this:

A "container" can be a box, a bag, a shaped plastic package, a "casing", a barrel, or even a railroad or truck tank car (for fats and oils)!

- b. "U.S. INSPECTED AND CONDEMNED." This mark is also applied with a metal brand dipped in approved dye. You have probably seen it being used on the kill floor. When you see a product so marked, it:
 - (1) Has been inspected and found unfit for human food.
 - (2) Must be destroyed for use as human food, and
 - (3) Must be kept under inspection supervision until it is obviously inedible.

**U.S. INSP'D AND
CONDEMNED**

- c. "U.S. PASSED FOR COOKING." This mark is applied to carcasses and parts passed for cooking by the veterinarian. Items so marked are kept under inspection supervision until the requirements for cooking have been met.

U.S. PASSED FOR COOKING

Security of Official marks of Inspection. Imagine if "U.S. INSPECTED AND PASSED" brands, and containers bearing the "U.S. INSPECTED AND PASSED" marks could be obtained and used by anyone without any kind of controls. What would the "U.S. INSPECTED AND PASSED" mark on a beef round or a ham mean to you then? Would you be assured that the frankfurters or bologna were wholesome, truthfully labeled, and produced in a sanitary manner? Could you say definitely that the products had ever been inspected by an inspector?

To maintain the integrity of the "U.S. INSPECTED AND PASSED" mark, a system of controlling the manufacture, procurement, storage, use and defacement of brands and containers bearing this mark was devised. Briefly, the system works as follows:

1. The establishment requests that the IIC complete an MP 216, Authorization Certificate. The IIC completes the certificate and the plant sends it with the brand order. The brands are sent to the IIC to be placed under security.
2. All brands must have serial numbers and an accurate inventory of all brands must be kept by inspection personnel.
3. The inspectors place the new brands in a locked area called a "reserve supply." They keep an inventory of the reserve supply, noting when a brand is added to or removed from the supply. In addition, at specified intervals, the inventory list is checked against the reserve supply on hand to assure that no brands have been misplaced.
4. The brands "in use" are kept in a "brand box" somewhere in the plant. It is more convenient that way. The "brand box" is a cabinet of some kind that is locked with an inspection lock to which only the inspectors have keys. It has an inventory list in it too, so that any inspector can compare the brands inside the box with the "in use" inventory and tell if any brands are not in the box.

5. The inspector unlocks the brand box when operations begin, again checking to see that the brands and inventory correspond.
6. Responsible plant employees designated by plant management take the brands they need to make the required marks on the inspected and passed products. These employees clean the brands and return them to the brand box by the end of the day's operations.
7. At the end of the day's operations the inspector checks the brands and inventory again. If they correspond, the inspector locks the box and goes off duty. If the brands and inventory do not correspond the inspector immediately notifies the plant management and a search begins. It is the inspector's responsibility to remain on duty until all brands are accounted for, and also it is the inspector's duty to lock the brand box when all the brands are in after the day's operation. The inspector must not go off duty leaving the brands out or the brand box unlocked. Any time that there are no inspector's on duty, all brand supplies (both "reserve" and "in use") are required to be locked up.
8. When a brand wears out (does not produce a clear legible mark) it is "defaced" in the presence of an inspector (a grinding wheel, for example, effectively destroys the face of a metal brand—it is not enough just to burn it) and marked off the inventory.

By following this routine the security of the brands is maintained and the integrity of the "U.S. INSPECTED AND PASSED" mark is preserved.

Labeling. Labels are another useful source of product information and means of identification. There are very specific requirements covering the wording, design, coloring, and use of labels so that the buyers of the labeled products will be correctly informed. The plant personnel have the labels they wish to use designed and a sample label made up. The sample is submitted to the FSIS Food Labeling Division, and if it meets the regulatory requirements, it is approved for use. Certain types of labels may be printed and used by the plant under the generic approval category, which does not require prior approval from FSIS.

The plant must keep a "label file" of all the plant's currently approved labels, and the inspector can check any of the plant's labels at any time to assure that only approved labels are being used. When the plant personnel decide not to use a particular label anymore they withdraw the label from the file and notify the FSIS Food Labeling Division that the label is obsolete.

Look at some labels (at the plant or in any food store). Note that a mark of inspection is not the same as a label. However, one requirement of a label is that it have the correct mark of inspection on it. Since they bear a "U.S. INSPECTED AND PASSED" mark, the manufacture, procurement, and use of labels is controlled (usually by records and inventories) to maintain the integrity of the mark. The unauthorized use of any "U.S. INSPECTED AND PASSED MARK" can result in fines, withdrawal of inspection, and detention of the products bearing the unauthorized marks.

Concepts for Control. Surveillance by inspectors encompasses all the methods used to assure that plant operations and products comply with the Regulations. Each plant is unique and the “working” details of each situation are different. The same item can be produced in many different but still acceptable ways.

Not only is each plant different, but conditions within the plants are constantly changing. Plants grow; equipment wears; different operating methods are initiated; employees change jobs; and plant personnel have different styles of doing jobs and managing. Likewise, inspectors have preferred ways, among the acceptable alternatives, of accomplishing the same job. In addition, new products and new technology demand new forms of supervision while making some of the present methods obsolete.

Then there is you. You will have your “first time for everything.” And you will continue to have “first times” in each plant each new day, because of the dynamic and rapidly changing nature of the meat industry. But, despite all these differences, the goal of inspection is the same in each plant—to offer as food only those products that are wholesome, truthfully labeled, and produced in a sanitary manner. How efficiently and effectively this goal is accomplished in each plant is influenced a great deal by the “modus operandi” of the inspectors in that plant.

**Points to
Remember**

Consider the following points as you progress through your training:

1. Packing plants are businesses providing livelihoods and services for a great number of people. People who raise feed crops; raise livestock; have livestock hauling businesses; make fertilizers and feeds; work with leather, pigskin, sheep pelts; make cosmetics; medicines; processed meats (bologna, franks, hams, etc.); operate retail stores—all and more depend on the packer for all or part of their income. So do the plant employees. To operate as economically as possible in compliance with the Regulations, the plants must “keep it clean, keep it cold, and keep it moving.” The inspectors, when deciding how much of what type of surveillance is necessary for compliance, should keep this industry saying in mind. The best combination of surveillance methods to use is that combination that assures compliance with the Regulations yet also permits products, edible and otherwise, to flow through the plants and out as speedily as the design of the plant and its approved operating methods allow.
2. You are part of an inspection team. Even if you are the only inspector in a particular plant, you have a supervisor, and other inspectors will be taking your place during your time off. They need to know what you are doing as part of your inspection assignment. Participate as a team member. Communicate. Pull together.
3. In general, packing plants cannot operate unless the inspectors are present. In particular, plants cannot slaughter unless the antemortem and postmortem inspectors are on the job. If the inspectors are late or unprepared when the kill is to begin, the plant must wait until the inspectors are ready. Meanwhile the plant has to pay its employees their wages even though they cannot work. Be on time and be ready. When you cannot be at your assignment on time, make every effort to notify the designated member of your inspection team as early as

possible. Remember, it does not matter why the inspector is late or not ready. Regardless of the reason (sickness, accidents, etc.), the plant cannot slaughter until inspectors are present and prepared to perform the required antemortem and postmortem inspection routines on each animal. Meat from animals that have not undergone the required antemortem and postmortem inspection in plants requiring inspection may not legally be offered for sale.

4. “Plant management” is people too. Most plants want to manufacture the highest quality products that they can. They know that quality sells and keeps selling. But meat and edible byproducts are very perishable commodities, and frequently plant management personnel must make major decisions very quickly in order to take advantage of changing market situations and production circumstances. Rarely, however, does the workload of plant managers permit them to keep up to the minute with the many changing details of inspection regulations and requirements. The inspection team—the whole team from Washington on down through the regions, areas, circuits and all the inspectors in the plant—tries to provide plant management with practical, timely working interpretations of the latest applicable regulations and procedures.

The spokesman for the inspection team in the plant is the inspector in charge, but all inspectors in the plant work with the inspector in charge to make the inspection procedure and methods changes called for by new Regulations and Directives. Each inspector needs to keep as up-to-date as possible, and learn how to apply new regulations and procedural changes to the varied situations that exist in each and every plant.

Record-keeping

In close association with identification systems are the plant and inspection record-keeping systems—another means of product control. Study the diagram on the following page.

As you observe the slaughter operations, note that the plant employees and the inspectors keep records. Some of the records are listed below.

Antemortem Records. Think of these as records of the “inputs” to the conversion process from live animal to human food. The plant employees keep a tally of the number of animals presented for antemortem inspection, and, in the case of cattle, how many bulls, steers, cows, and heifers were included in the total. The inspectors record how many animals were “passed for regular slaughter,” how many were “suspects,” and how many were “condemned on antemortem.” These numbers, along with descriptions of animals and findings when necessary, are recorded on official FSIS forms.

***RELATIONSHIP OF PRODUCT FLOW, IDENTIFICATION METHODS, AND
RECORDS CONTROL OF A PROCESS DIAGRAM GOES HERE***

Postmortem Records. These records can be likened to “defective parts” records in a manufacturing process. The postmortem inspectors and the veterinarian tally the numbers of diseased and abnormal carcasses and livers as the kill progresses. The numbers or pounds (whichever is applicable) of condemned livers and carcasses are tallied according to specific categories. The tallies are totaled at the end of the day.

Antemortem and Postmortem Summary. The data from the antemortem and postmortem records are transferred to this summary form, which is actually a computer form. When the summary is completed at the end of each week of slaughter operations, it is mailed to Chicago where data entry operators log the information into the computer. Rapidly the data from about 6,500 plants nationwide is tallied and summarized into reports which assist inspection, Veterinary Services, and the industry in managing the complex interactions that result in a wholesome meat supply for consumers. From these computer printouts slaughter trends can be determined, disease outbreaks can be located, and the supply of live animals related to the carcasses on hand plus the demand for meat by consumers. In addition, the data is compiled in the annual Statistical Summary and Report to Congress as required by law.

The Tanking Report. This optional form may be used to document slaughter condemnations and control the location and treatment of condemned livestock, carcasses, and livers. By comparing the information on it with information recorded at different times on other forms, the inspectors are assured that condemned material was actually treated to make it obviously inedible before it left the plant premises as required by the Regulations.

Note

There are many more forms and reports, most of which are identified by a number. As you begin to use these forms, you will learn their numbers, when and how to complete them, and where they are sent. You will also learn how to compare the data on them for control purposes, and how to file them.

Information in the form of records and reports is one of the most important “products” produced by inspectors.

In many instances, these records are the *only* written documentation that inspection according to law was even conducted.

Also, often they are the only way to tell that the products in the plant were actually prepared or disposed of according to law.

GOOD INSPECTORS INVARIABLY PRODUCE ACCURATE, TIMELY, LEGIBLE, AND COMPLETE RECORDS.

FOURTH DAY

Your trainer will do the following:

1. Discuss swine postmortem procedures in detail.
2. Demonstrate the correct procedures.
3. Have you practice swine postmortem inspection procedures.
4. Determine if you are performing swine postmortem procedures correctly.
5. Have you read the Inedible and Condemned material in this step of the EDG.
6. Have you observe the methods used to control condemned and inedible material.
7. Have you observe the methods used to control restricted product.
8. Have you observe plant clean-up activities in various departments.

INEDIBLE AND CONDEMNED

Introduction

Although inedible and condemned materials are not suitable for food purposes, they do have many uses in our society. Leather, for example, is an important byproduct of cattle slaughter. High protein feeds, fertilizers, and inedible oils are also important byproducts of packinghouse operations. Some animal parts, such as thyroid glands, pituitary glands, adrenal glands, etc., are used by drug manufacturing companies to make medicines. Some musical instrument strings and “catgut” surgical suture materials are still made from sheep casings. You will discover many interesting uses of inedible and condemned materials as you progress through your career.

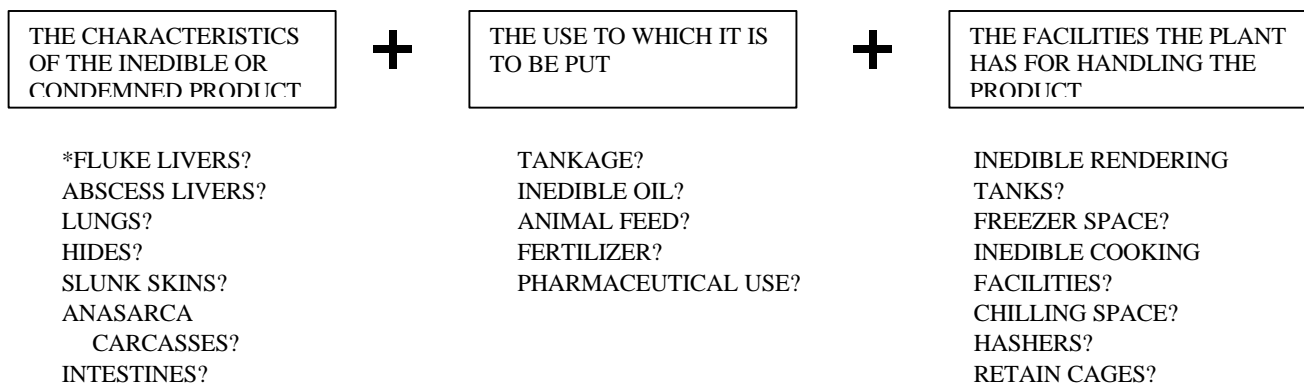
The primary purpose of the meat packing plant, however, is to produce food for consumers. Nonfood animal parts and the processes designed by the plant to handle them must not in any way contaminate the edible products intended for human food, or the facilities and equipment used to prepare food products. All facilities, equipment, nonfood animal byproduct items, and their identification processes are approved by MPI officials before use by plant employees.

The basic inedible and condemned materials handling procedures are standard throughout the nation so that inspectors and industry personnel can move from plant to plant and still recognize whether a specific product has been inspected and passed, has been designated inedible, or has been condemned. Also, standardization of the basic procedure facilitates control of the products. Not only are they less likely to be handled unacceptably, but also they are less likely to contaminate edible products or edible products facilities and equipment.

All inedible and condemned material must be obviously unfit for human food by sight, taste, or smell before it leaves the official premises of the plant. (There are a few exceptions to this generality, but these items must be kept under lock or seal.) In addition, any inedible or condemned material that looks like edible product is kept under inspection supervision until it is made obviously inedible.

The handling process and the treatment method used for a particular inedible or condemned product depends on:

1. The characteristics of the product itself.
2. The use to which the product is to be put.
3. The facilities that the plant has to handle the product.



* Requirements and procedures are discussed in class.

Categories Of Nonfood Byproducts

For identification and handling purposes, nonfood animal byproducts fall into three main categories.

- Naturally inedible
- "Designated" inedible, and
- Inspected and condemned

How any specific item is classified depends on its characteristics.

Naturally Inedible. If an item normally could not possibly be confused with the edible products, then it is naturally inedible. Since it is already obviously inedible, it need not be treated. However, it is handled very carefully on the kill floor by the plant employees so that it does not contaminate edible parts or the equipment and facilities used for edible products. Examples are hides, hair, intestines with content in them, toenails, horns, bile, and so on.

Designated Inedible. "Designated" inedible products fall into two subcategories:

1. Those designated inedible by the Regulations. Tonsillar tissue and lungs are examples.
2. Those parts that *may* be collected as edible products but which the plant does not wish to collect and prepare for distribution to consumers.

For example, one plant may decide not to save spleens or caul fat. Another plant may not save weasand meat or casings.

Both types of designated inedible products usually have the characteristics of edible products. Therefore, they must be treated in an acceptable manner to make them obviously unfit for human food before they leave the official premises of the plant.

In addition, all inedible items which require inspection (according to the inspection routines) must be presented in a sanitary manner for inspection, and may not be diverted into inedible channels until inspection has been completed.

For example, if the plant does not wish to save spleens, caul fat, and tripe as edible, why must the plant employees present these parts in a sanitary manner for viscera inspection and not send them to the tanking area until after inspection has been completed? Why must lungs also be presented for inspection even though they may have been designated inedible by the Regulations? Because these parts may contain disease lesions or abnormalities which could influence the acceptability of the whole carcass for human food. An enlarged soft spleen could be caused by many diseases that make the entire carcass unfit for food, and the lungs may contain pneumonia lesions that should be examined, along with the rest of the carcass, by the veterinarian.

Inspected and Condemned. Inspected and condemned material can be any carcass or part (including those designated inedible) that has been inspected and found to be unfit for human food. Such product is liberally stamped "U.S. INSPECTED AND CONDEMNED" as soon as it is found to be unwholesome. Then the condemned items are kept within the inspector's sight or in a locked or sealed area until they are treated to make them obviously inedible.

PHASE	EXAMPLES OF INEDIBLE AND CONDEMNED MATERIALS PRODUCED IN THIS PHASE	
Live Animal Area	Picture of Cow	Manure Control until rendered inedible: Dead animals Condemned animals to be destroyed
Dressing	Picture of Carcass	Unless saved as edible, most of these appear obviously inedible: Blood Hides Ears Switches (tails) Hog hair Toenails Cattle feet Pizzles Etc.
Viscera	Picture of Viscera	Obviously inedible: Paunches with content Stomachs with content Intestines with content Lungs--designated inedible but do not appear obviously inedible.
Inspection	U.S. INSP'D AND CONDEMNED	Control until rendered inedible: Any carcass or part
Cleanup		Organic material and fat into the sewage disposal system.

**Treatment of
Inedible and
Condemned
Material**

Just how the inedible and condemned material is treated depends on the use to which it will be put and the kinds of facilities the plant has to handle and treat it. Some of the more common uses for inedible and condemned materials are:

- Hides, skins, switches, and related items.
- Rendered animal, poultry, or fish feed (called "tankage").
- Inedible oils.
- Fresh (not rendered) animal, fish, or poultry feed material.
- Pharmaceutical manufacture.
- Specimens for research or teaching.

The actual facilities and equipment for handling inedible and condemned products vary from plant to plant but basically most will have the following:

1. A separate "tank room" or separate area for condemned and inedible items.
2. Facilities and equipment to treat acceptably (make obviously unfit for food) the day's production of inedible and condemned materials.
3. Adequate storage space for materials and equipment as necessary.
4. Facilities and equipment to acceptably treat animals dead in the antemortem pens or animals that have been condemned on antemortem inspection and are to be destroyed.
5. Facilities and equipment to prepare, identify, and store fresh animal food.

As the slaughter operations proceed, the inedible and condemned items are continually removed from the kill floor in order to maintain sanitary conditions for the edible portions of the carcass. Depending on the plant design, these products are either placed in containers or dropped into chutes leading directly to the tanking area. If containers (barrels or trucks) are used, they are identified by having the word CONDEMNED or INEDIBLE (whichever is appropriate) prominently marked on them. They may not be used for edible products intended for human food, nor may inedible or condemned materials be placed in unmarked containers normally used for edible products. This is an example of "equipment separation" to prevent the possibility of the contamination of edible products by inedible and condemned items. If barrels or trucks are used, they are removed to the tanking area and emptied frequently enough to prevent overfilling. Some inedible and condemned products may normally bypass the tank room. Examples are hides (which go to a "hide cellar"), paunch content, blood, and hog hair. The floor drains capture much organic material and fat, which becomes part of the sewage discharge from the plant. The plant sewage treatment system converts these and the other plant sewage (from toilet facilities, etc.) into harmless byproducts. Fresh material for animal food is placed in separate appropriately marked containers and may be prepared, identified, and

packaged in the slaughtering area. After packaging, it is stored in a designated area in the cooler or freezer.

The material that does go to the tank room and does require treatment to make it obviously inedible may be treated by several acceptable methods, depending on the type of facilities present in the plant. The two most common methods of treatment are "tanking" (inedible rendering) and denaturing. Brief descriptions of each follow.

**Inedible
Rendering
Facilities**

When inedible rendering (cooking) tanks are available in the plant, the materials intended for rendering are usually loaded into the tanks continuously as the slaughter operations proceed. The tissues may be hashed (ground up) before being placed in the rendering tanks.

There are several different types of inedible rendering tanks and processes. The tanks themselves may sit vertically or horizontally. Regardless of the specific type of tank, there are the following parts:

- A loading (charging) opening.
- An opening to remove the rendered solids.
- An opening to remove the inedible oil.

The rendered solids may be put through an extractor to remove the last of the inedible oil. The solids leave the extractor as a dry high-protein powder. It is sacked or otherwise contained to await removal from the official premises. Study the basic diagram for an overview of the inedible rendering process.

INEDIBLE RENDERING PROCESS DIAGRAM GOES HERE

Denaturing

In some circumstances the plants prefer to treat certain inedible and condemned products with chemicals to produce the appearance of being obviously unfit for food. Plants with no inedible rendering facilities often elect to send their inedible and condemned material to a commercial rendering company. All but the naturally inedible material must be made obviously inedible before leaving the plant's premises. To give the material the required inedible characteristics the plant employees slash it and liberally apply an approved chemical that imparts a distinctive color and offensive odor.

The slashing and chemical application is called denaturing. The chemical is a denaturant. Study the following diagram for an overview of the denaturing process.

DENATURING PROCESS DIAGRAM GOES HERE

**Fresh Animal
Food**

The plant personnel may wish to save some of the fresh inedible and condemned material for animal food (especially pet food) or fish or poultry feed. Examples of the types of fresh material that may be saved for animal food are livers condemned for certain specific conditions, lungs that are not diseased, and carcasses condemned for certain specific conditions. Briefly, the system is as follows.

Condemned items are either treated to make them obviously inedible or, in approved (by FSIS) instances, shipped untreated under inspection seal to approved animal food manufacturing plants. At these pet food plants the seal is removed by an inspector and the condemned products supervised until they no longer can be mistaken for their wholesome counterparts. Condemned items that are treated are freely slashed and a nontoxic denaturing agent mixed completely through them. Examples of denaturing agents are finely powdered charcoal and food grade coloring dyes. Notice that on fresh items for animal food the treating process is called denaturing and the chemicals used are nontoxic denaturants.

The following diagram outlines the denaturing process:

***DENATURING PROCESS OR IDENTIFICATION PROCESS DIAGRAM GOES
HERE***

After being slashed and denatured, the product is put in appropriately identified containers to await shipment from the plant.

As mentioned earlier, lungs that are normal may also be saved for fresh animal food. Lungs have been designated inedible, but if they are diseased they are condemned. Condemned lungs may not be saved for fresh animal food. Because lungs are inedible, those saved for animal food need not be slashed and identified with a chemical. They must, however be put in appropriately identified boxes or containers (an acceptable statement on the container would be "Species/lungs--NOT INTENDED FOR HUMAN FOOD"). The containers are chilled or frozen as necessary to await shipment from the plant, as are the condemned animal food byproducts.

**Inedible and
Condemned Area
Sanitation**

Sanitation is particularly important in the handling of inedible and condemned material. Hands, arms, aprons, and equipment can transfer contaminants from inedible and condemned materials to edible products or to surfaces on which edible products are placed. Splash from floors and equipment by overzealous use of high-pressure hoses in cleanup operations is a constant problem. Both plant employees and inspectors must maintain a constant vigilance to prevent contaminant transfer.

The inedible and condemned areas need to be kept clean and uncluttered to eliminate breeding places for insects and vermin and to eliminate the safety hazards caused by mess and filth.

**Inedible and
Condemned
Reporting**

The Tanking Report is an optional document that may be used as a record of the types and amounts of condemned materials. Your trainer will discuss what is done at this plant.

FIFTH DAY

Your trainer will do the following:

1. Have you report for pre-op sanitation inspection.
2. Have you read the Sanitation material in this step of the EDG.
3. Discuss and demonstrate sanitation requirements in various areas of the plant (employee welfare rooms, dry storage areas, maintenance areas, etc.).
4. Have you read the Allied Departments and Support Areas material in this EDG.
5. Demonstrate carcass reinspection procedures.
6. Demonstrate boneless beef inspection procedures.
7. Have you read the Beef and Pork Products material in this EDG.
8. Have you observe viscera separation, fabrication, and food preparation.
9. Give you the opportunity to participate in a question and answer session.

SANITATION

Introduction

The Regulations require that all meat and meat products are to be produced "in a sanitary manner." Every effort is made by the plant employees to prevent contamination of the edible carcass meat and parts as they move through the plant.

Contamination can occur by two main routes:

1. From unsanitary surroundings (for example--cuts and abscesses on hands; unclean equipment; clothing; nonpotable water; vermin; and many more).
2. From unsanitary procedures (for example--the hair side of the hide contacts the skinned out surfaces of cattle, infected or mastitis milk runs out on the skinned-out carcass when the udder is cut, fecal material contaminates the inside of the carcass when it escapes from the digestive tract).

Unsanitary Procedures

Sanitary dressing procedures have been developed jointly by industry and inspection to prevent contamination from unsanitary dressing procedures. For example, the bung is tied when necessary to prevent leakage of the contents. Sanitary dressing procedures vary depending on how the carcass and parts will ultimately be used and the type of facilities the establishment has.

Unsanitary Surroundings

The surroundings, if not clean and designed to limit the spread of contaminants, also contribute to the contamination of products.

Picture your surroundings as you read this page. What components of your surroundings could "contaminate" you and what are their chances of doing so?

1. The air is a component of your surroundings. If the air were polluted, what are chances of it "contaminating" you? Right--100%
2. Walls.
3. Floor.
4. Ceiling.
5. Equipment--in your case probably a chair, this workbook, your clothing, etc.
6. Flying and crawling insects.
7. Rats and mice.
8. Cleaning compounds, pesticides.
9. Chemicals and additives used in the production procedures.
10. Inspectors an plant employees, their health, presence of infected wounds, etc.

Now picture these components in a slaughter area.

Ventilation. The air is kept moving, and fresh air is drawn from clean sources. In other words, the air intake for the kill floor is *not* through the antemortem pen area or tank room. Air is considered to cause *direct* product contamination since it circulates around and touches the edible products.

Walls. Generally, walls do not directly contaminate the edible products although they can. Paint flakes and bits of organic matter can fall into product. The proximity of product to the wall influences the possibility of contamination from it. Most walls are considered to be potential or possible product contaminant sources.

Floors. Floors are like walls. Also, unclean floors present a grave safety hazard. Water splashed from floors and walls into edible product is a means of direct product contamination.

Ceilings. Contamination from ceilings, overhead beams, and rails can fall directly into the product. Overhead structures present a major sanitation problem in packing plants because of the dust, condensation, flaking paint, rust, and other contaminants.

Equipment. Equipment has direct product contact surfaces (saw blades, rack hooks, the inside of pans, etc.), surfaces that might contact the product (the outside surfaces of pans, etc.) and surfaces that are unlikely to contact product (the inside of motors, undersurfaces of large pieces of equipment such as tables, etc.)

In addition, equipment can function in an unsanitary manner--oil may drip, a plugged drain may cause water to overflow, or high water pressure may cause splash beyond the splash shields on a piece of equipment.

Flying and crawling insects. Flies, cockroaches, and other insects can move anywhere, transferring contaminants. They are considered *direct* sources of contamination when present.

Rats and Mice. Again, direct sources of contamination! Rats and mice can contaminate edible products by:

1. Excreta.
2. Transfer from an unsanitary area to product.
3. Infecting edible products with diseases transmissible from themselves to man.

Cleaning Compounds and Pesticides. Soaps are an example of compounds that could contaminate product if the people using them do not wash them off. Medicines applied to wounds on the hands and hand lotions are also sources of product contamination. Fly sprays and other pesticides pose a complicated problem. Most sprays do not kill immediately. The sprayed fly or cockroach can move around, possibly ending up dying in a pan of edible product. Not only is the insect there, but so is the pesticide. Every chemical used in a packing plant must be approved and used in an approved manner.

Approved chemicals are listed in the "List of Proprietary Substances and Nonfood Compounds" booklet, which is revised periodically to keep the information current.

Chemicals and additives used in the production procedures must also be approved. Examples of chemicals used in slaughter processes are:

1. Hog scald compounds--help to loosen the hair.
2. Tripe scald compound--helps in the scalding process.
3. Salt for the shroud solution--must be food grade salt.
4. Salt for "curing" hides--need not be food grade.

Again, all these chemicals must be approved. The inspectors check all "nonmeat" items such as these when they are brought into the establishment. How the inspection of nonmeat items is accomplished will be covered later in your training.

A very important component of your surroundings is other people. They can have contagious diseases and their infected cuts can contaminate product. Most bacteria and other microorganisms grow very rapidly in meat and meat products. All the essential nutrients for optimum growth are there. Food poisoning originating from the Staphylococci and Streptococci microorganisms (among others) from workers' noses, mouths, and infected wounds is more common than food poisoning from microorganisms originating in the animals!

One last point. *You* are part of other people's surroundings. *You* influence others by how neat and clean *you* appear and how sanitary *your* habits are. If you are careless, or do not use exemplary sanitary habits, others will become sloppy too. Remember you represent FSIS to everyone who comes in contact with you. Make sure they recognize your dedication, knowledge, and ability.

**Direct,
Potential,
And Remote
Sources of
Contamination**

The components of the kill floor surroundings can be *direct* sources of contamination, or *possible* (potential) sources, or *remote* sources. How any one item is actually classified in a specific plant varies according to the unique circumstances in that plant. Each situation is considered individually. If contamination is *direct*, that means the edible product is unsanitary and steps are taken to correct the situation immediately. Circumstances classified as *potential* or *remote* sources of contamination--no edible product is contaminated in these situations--are corrected according to a plan and time schedule agreed to by inspection and plant management. Temporary protective measures are sometimes utilized until permanent corrections can be made. The inspector is aware that the classification of any situation can change. For example, a painted ceiling is a potential contamination source and a periodic maintenance plan to keep it in good repair is agreed to by inspection and plant management. However, if paint flakes are found in the edible product, then the ceiling has changed from a *potential* source to a *direct* source. Similarly, pans, racks, and barrels tend to wear with use. A periodic repair and maintenance plan is necessary if these articles are to remain acceptable. Equipment with rusty or cracked product-contact surfaces becomes direct contamination sources.

CONTAMINATION SOURCES DIAGRAM GOES HERE

Remote sources of contamination are those far from the edible products. Dry storage areas, the outside premises, and the employee welfare areas are examples. But how remote is remote? People, flies, rats, mice, air, equipment, etc., can travel from room to room throughout the plant and carry contaminants from boiler rooms, hide cellars, manure piles, etc., to the edible products. To prevent this type of transfer, certain equipment is limited to specific uses; people are not permitted to switch from some jobs to others without a complete cleanup and clothing change; and some vigorous active programs to exclude all insects and vermin are maintained. Your trainer will show you examples in this plant.

As you think about the surroundings in a packing plant, consider the following points.

1. To check the sanitation of some components, you should examine them before they are used--for example, pans, racks, gambrels, etc. Once they are loaded with edible product, it is difficult to tell if they were clean before use or not.

2. To check the sanitation of other components, you would have to examine them *while the operation is proceeding*. Examples are oil dripping from a saw, water splashing excessively, flies accumulating during operations, a plugged drain, etc.

**Preoperative
Sanitation
Inspection**

The inspection made before the facilities and equipment are used is called "preoperative sanitation inspection." The objective is to check that the necessary cleanup and repairs have been made between the last use of the facilities and equipment and this next use. Under optimum conditions bacteria can double in number each 20 minutes. Bits of meat, fat, and other organic material on kill floor equipment can be loaded with microorganisms in just the 16 or so hours between consecutive days' operations.

**Operational
Sanitation**

Sanitation inspection during the slaughter process is called "operational sanitation." The inspectors and designated plant employees constantly monitor the equipment and plant employee's procedures to see that the operation continues to be performed in a sanitary manner. The details of who does what vary from plant to plant. Your trainer will show you what is done at this plant.

ALLIED DEPARTMENTS AND SUPPORT AREAS

Allied Departments

The Plant Facilities Section (B.3) outlined the various areas used to convert live animals into human food in the typical plant. Basically the process flows as follows:

PLANT DIAGRAM GOES HERE

The "allied departments" are those in which the inspected and passed products (and some others as approved) are prepared for shipping from the plant. Depending on the size of the plant and the kinds of products the plant produces, the allied departments may include:

1. A "quick chill cooler" or "hot carcass cooler" in which the body heat is initially removed from the carcasses.
2. A "viscera separating area" to prepare the inspected and passed viscera for chilling and to bone out heads (remove the meat from the heads). Sometimes this area is part of the kill floor, sometimes it is a separate room.
3. An "offal cooler" for carcass parts.
4. Various beef coolers--including carcass storage coolers, aging coolers, and "breaking" coolers in which the beef carcasses are cut into quarters and primal parts.
5. Various freezers for freezing and storing.
6. Edible rendering areas for making, packaging, and storing lard, pork fat, and tallow (beef fat).
7. A "boning" room--in which cattle carcasses are boned.
8. A "pork cut" in which pork carcasses are cut up into their various parts--hams, picnics, loins, jowls, bacon sides, etc.
9. Loading docks for shipping and receiving products.

The names of the rooms and areas usually describe the operations performed in them.

Also, if the plant produces processed products such as bologna, cured and smoked meats, frankfurters, etc., it will have even more product handling rooms.

***EXAMPLE OF BEEF PLANT ALLIED DEPARTMENTS DIAGRAM GOES
HERE***

***EXAMPLE OF SWINE PLANT ALLIED DEPARTMENTS DIAGRAM GOES
HERE***

Again, the actual areas that any specific plant has vary with its activities. In the examples, for instance, the plants do not have an edible rendering area for fat manufacture. A plant that did not bone beef would not have a beef boning room and so on.

Regardless of the plant's activities, there are at least two functional areas that the plant will have.

1. A "retain cage" somewhere in the cooler and, if necessary a retain cage in a freezer. The retain cage is an area enclosed by wire mesh or some other material that can be locked using an inspection padlock or seal. It is not possible to remove anything from the locked cage without the inspector's knowledge. Generally the retain cage is large enough to hold a retained carcass hanging from an overhead rail in addition to several barrels or containers of product. The retain cage bears a sign "U.S. RETAINED." Larger plants may have several.

2. A "returned goods" area. Somewhere in a refrigerated area near the unloading area on the docks will be a designated area, with a table and other equipment and lighting as necessary, to which all meat products returned to the plant are placed immediately upon entry into the plant. This area is also identified with a sign. No returned products may leave this returned goods area for any other location in the plant (including the tank room) or be reshipped until they have been examined by an inspector.

The inspection coverage needed in the allied department areas depends on what operations are conducted and when. The specific procedures are learned by inspectors when they are initially assigned to perform this coverage, usually after they are proficient postmortem inspectors.

**General
Inspection
Principles
For Allied
Departments**

Some general principles of inspection to remember about allied department procedures are these:

1. All areas are subject to sanitation inspection.
2. All edible meat or meat byproducts have already undergone antemortem and postmortem inspection (and possibly one or more reinspections) and *have been passed* before they enter the allied department areas.
3. All production processes and products (ingredients, intermediate products, and final products) are subject to reinspection at any time.
4. There are specific places and items to check and inspection procedures to perform at designated times in allied departments inspection, but the schedule is not as rigid as is that of "line" inspection such as antemortem and postmortem.
5. It is impractical to do 100% inspection (as is done on the animals) on every piece of every item in the allied departments.

Each animal that is ultimately inspected and passed on the kill floor may be in up to 20 or more different pieces in the allied department areas. Yet even though the parts were all inspected and passed before they left the kill floor, some may be defective when examined in the allied departments areas. What can go wrong? Consider these situations:

1. Products may become contaminated after they leave the kill floor.
2. A part that is not incised during postmortem inspection may contain a defect. These conditions are generally of a minor nature, like a small bruise on an apple. Examples are simple bruises, uncomplicated broken bones, and well-localized abscesses in jowls.

3. A piece that is wholesome but is not up to the quality standards of the plant and is rejected by the plant employees.
4. The wrong piece in a barrel by error (for example, a piece of head meat in with cheeks).
5. An accident, such as a barrel of product tipping over or trays falling, spilling a product.
6. Product may spoil.

Reinspection

The reinspection of parts in the allied department areas is a combined plant employee-inspection effort. The design of the process influences the amount and type of defects ultimately found in the final product, as do the management and maintenance of the system. Examples of how the plant personnel attempt to reduce the defects are:

1. The processes for preparing the products are designed to reveal common defects. For example, hog jowls are sliced and examined by company employees before being used in prepared products because of the frequency of jowl abscesses undetectable on the kill floor.
2. The product flow is designed to anticipate and prevent as many defective products as possible.
3. Sanitary maintenance efforts are designed to anticipate and prevent contamination and breakdowns.
4. Contingency plans for the more common emergencies are formulated beforehand.

When reinspecting the products as the process progresses, inspectors and the plant quality control personnel frequently use sampling to detect defects. The sampling method saves time and has proven to be as accurate as 100% inspection. Usually the products produced by skilled, experienced, and conscientious employees are of a uniformly high quality. If such an employee produced 100 items correctly, the chances that the 101st item produced by the same employee would be acceptable, too. So a check of a sample of the items accurately reflects the acceptability of the total production of this employee.

If the employee was producing unacceptable items, usually there are enough defective pieces so that a check of a sample would reveal this also.

Sampling is becoming an increasingly common method of monitoring the processing (cutting, boning, weighing, packaging, etc.) of inspected and passed carcasses and parts after they leave the kill floor.

For some processes formal statistical sampling plans have been developed to assess the condition of the items produced by that process. A specific number of sample units (based on the total number of items produced by the process) are selected at random and examined. The number and types of defects found determine if the total number of items represented by sample are accepted or rejected.

Examples of formal statistical sampling programs are the Beef Carcass Reinspection Program, the Monitoring Phase Biological Residue Sampling Program, and the Boneless Meats Reinspection Program. Your trainer will show you examples of statistical sampling programs in this plant. *Be sure to observe these procedures.*

Most sampling is "informal." The inspector examines a portion of the items, operations, or equipment as necessary. After experience and familiarity with the unique circumstances of the particular plant, the inspector learns where to look, what to look at, what to look for, at what time to look, and how often. Alerted by changes in the plant's operating patterns (for example, new help, unseasonable weather, a new supplier, equipment problems) the inspector varies the informal sampling patterns as necessary to assure that the processes are conducted according to the Regulations and the products are wholesome and truthfully labeled.

Support Areas

Notice that there are many areas in the plant vital to its operation in which edible or inedible meat products may never be handled or stored. These areas have been grouped together as "support areas." Sanitation and safety are as important in them as in the edible products areas. The support areas are routinely inspected along with the rest of the plant. Briefly, the support areas consist of:

1. Dry storage areas--for packaging materials, cleaning compounds, pesticides, nonmeat food items (such as salt and spices), empty equipment storage areas, etc.
2. Maintenance areas--janitorial services, boiler rooms, refrigeration motors and compressors, possibly a truck garage, etc.
3. The plant offices.
4. Lunchrooms.
5. Employee welfare rooms.
6. Hallways, corridors, elevator shafts, stairways.
7. Driveways, parking lots, etc.
8. The Government Inspection office.

Even though no exposed products may move through these areas, people, equipment, insects, vermin, and air can circulate from these areas to exposed product in other areas. As far as safety goes, people who break a leg in the shower are just as incapacitated as those who break a leg on the kill floor. There is no substitute for good housekeeping and safe practices anywhere in or around the plant.

BEEF AND PORK PRODUCTS

Introduction

Up to this point terms such as "meat," "carcass," "parts," and "product" have not been precisely defined. We tend to call anything from a dead animal in the pens to a side of beef in the cooler a "carcass." For legal purposes, however, each term has a precise meaning. The precision is necessary to communicate via labels, and to achieve uniformity in the composition of products. To illustrate the effect of precise definitions upon communication, consider the following examples.

1. May "All Meat Frankfurters" contain tongue meat? Heart meat? Esophagus meat? Diaphragm meat? Chicken meat?
2. May "All Beef Frankfurters" contain beef livers? Beef spleens? Beef kidneys? Beef tripe?
3. May frankfurters contain heart meat? Tripe? Mutton? Goat meat? Tongues?
4. May "Whole Hog Sausage" contain pork livers? Pork spleens? Pork snouts? Pork kidneys?

Inspectors routinely examine products and their labels for both truthful information (the item in the container is actually the item named on the label) and for conformity to the appropriate standard of composition if applicable. (If the label says "all meat," then the product is "all meat.")

Definitions

To be able to check the label and composition, inspectors must learn the legal definitions of the terms used. However, few people adhere to the precise, correct definitions of inspection terms in day-to-day communications. Few people outside of the industry are even aware of the legal definitions. So inspectors need to learn the common meanings of these terms as they are used in the plants and by the public in general. The meaning of many of these terms varies from area to area around the country and within the context of the discussion. Because of the variation in customs, it will be necessary for you to pick up many of the local expressions at your various duty stations. If you are not sure what a person means when using a term, be sure to ask.

The following is a list of definitions of some of the more common terms. The full legal definition is printed in the "Definitions" part (Part 301) of the Regulations.

Carcass. Means the same as "carcass and parts."

Meat. The muscle that is on the skeleton (framework of bones) or that is found in the tongue, diaphragm, heart and esophagus.

Meat byproduct. Any part (other than meat) capable of use as human food which has been derived from one or more cattle, sheep, swine, or goats. This term shall have a comparable meaning as applied to products of equines.

Edible. Intended for use as human food.

Inedible. Adulterated, *uninspected*, or not intended for use as human food.

Offal. This term usually refers to all the parts that are removed from the skeletal meat part of the carcass. There is "edible offal," including the meat and tissues "boned" from the head as well as the heart, liver, spleen, and other viscera. "Inedible offal" is everything not saved for distribution to consumers. Exactly which items are "edible offal" and which items "inedible offal" vary from plant to plant depending on which items the plant saves as edible and which it has designated as inedible.

Byproducts. The common usage of this term varies considerably depending on the context of the discussion. Again, most plant and inspection personnel refer unofficially to "edible byproducts" and "inedible byproducts." "Edible byproducts may include not only items derived from the viscera, but also items derived from the head and tail, and maybe "ham hocks" and "pigs' knuckles," etc.

Viscera Separation. The process described by this term refers to the trimming and cleaning of the items derived from the viscera that the plant saves as edible. It also may refer to the trimming and cleaning of items saved from the head, including cheeks, head meat, tongues, lips, snouts, pork ears, and brains. In addition, the term may encompass the preparing of sweetbreads, oxtails, kidneys, weasands and other items that are not part of the viscera. The inspector doing "viscera separation inspection" often inspects many items that are not derived from the viscera. The reason for lumping together all the items mentioned into the term "viscera separation" was probably to conserve words. Don't be surprised to find yourself examining items derived from tissues other than the viscera during "viscera separation" inspection.

Dressed carcass. This is a good term to use when referring to the skeletal meat part of the carcass. The viscera has been removed. Usually the head has been removed also, although occasionally in swine the head may be left attached to the carcass. What the dressed carcass includes varies from plant to plant. Some plants remove the kidneys; others leave them in. Some plants pull the "leaf fat;" others don't. Your trainer will explain to you what is done at this plant.

Side or half. Refers to one "side" (either left or right) or half of dressed carcass.

Study Areas

Each part saved as edible by the plant is, after being inspected and passed, trimmed and cleaned as necessary before chilling. Some parts are scalded. Some are branded. In addition they are reinspected (viscera separation inspection) before packaging or chilling. The requirements for each part are discussed in the classroom sessions. Before learning these requirements, however, you should recognize as many of the different dressed carcass and edible offal parts as possible. You should first be able to tell what the pieces of meat and organs on rails, racks, trays, and in barrels are. Chilling may change the appearance of some parts. Recognize them when they are warm, and after they are chilled.

When you are ready to examine the products available in this plant, tell your trainer and a time will be arranged. Remember to examine the items when they are warm and after they are chilled. Try to name both the species and the part, for example "beef tongues" vs. "pork tongues," "beef cheeks" vs. "pork cheeks," "beef kidneys" vs. "pork kidneys." Concentrate on recognizing the parts and associating them with the diagrams, which are similar to the visual aids used in the classroom.

CATTLE--SOME EDIBLE OFFAL PARTS DIAGRAMS GO HERE

CATTLE--SOME EDIBLE OFFAL PARTS DIAGRAMS GO HERE

PORK PRODUCTS--PAGE 1--LABELED DIAGRAM GOES HERE

PORK PRODUCTS--PAGE 2--LBELED DIAGRAM GOES HERE

B.14.1
Sept 1997

FSIS DIRECTIVE 4200.
ATTACHMENT 2

***SUPERVISORY CHECKLIST FOR ORIENTATION--PHASE III GOES HERE
(PAGE 1)***

***SUPERVISORY CHECKLIST FOR ORIENTATION--PHASE III GOES HERE
(PAGE 2)***

PROGRESS SHEET **(Step B)**

Dr. _____ completed this step of the Employee Development Guide that consisted of the following:

General Plant Orientation
Plant Facilities
Safety
Plant Tour
Knife Sharpening
Antemortem
Packing Plant Equipment
Anatomy Review
Cattle Postmortem Inspection
Identification Systems and Records
Swine Postmortem Inspection
Restricted Products
Condemned and Inedible Material
Sanitation
Viscera Separation
Fabrication
Reinspection
Food Preparation

Comments:

Signature (Trainer)

Date

VETERINARY INTERN PROGRAM

Meat and Poultry (904)

STEP A

District Office
Orientation
2 Days

STEP B

Designated Training Station
Plant Familiarization
Approximately 5 Days

STEP C

Designated Training Station
Technical OJT
Approximately 4 weeks

STEP D

Training Center Classroom
Supervision/Management,
Approximately 2 weeks

STEP E

Designated Training Station
OJT in IIC Responsibilities
Minimum of 2 weeks

STEP F

Designated Training station
Assessment Assignment
Trainee gets the opportunity to apply the new knowledge
and skills with limited supervision.
Minimum of 1 week

STEP G

Duty Station
Independent Assignment
Approximately 4 – 8 months

STEP H

Training Center
Seminar
(1) In-depth review of supervision/management responsibilities;
(2) in-depth review of IIC responsibilities; and (3) review of
carcass disposition.

TRAINING POLICIES & PROCEDURES FOR THE TRAINER

- Prior to receiving the employee, prepare the training site by assuring that the equipment and supplies are available at the training station including the necessary CBT modules.
- Review Step C of the Employee Development Guide (EDG).
- Welcome the employee and provide him/her with orientation to your plant and to the FSIS policies that apply to your plant.
- Review the 904 Assignment Profile at the end of Step A in the employee's copy of the EDG.
- Review the Step B Progress Sheet in the employee's EDG.
- Give the employee a brief tour of the plant (if needed).
- Introduce the employee to the other FSIS employees in the plant.
- Introduce the employee to the plant personnel.
- Show the employee where to go in the plant to practice meeting the objectives in each section. As much practical experience as possible should be integrated into the time spent at the training station.
- Show the employee the location of the equipment and supplies that will be needed to complete the modules in each section, including the computer that will be used for the CBT modules
- Provide the time and necessary learning environment for the trainee to complete each module on the 904 Veterinary Intern and the 904 Prerequisite CD-ROM.
- Review and discuss the modules and supplements with the employee and allow time for practical application of what they have learned.
- When the employee feels that they are ready for testing on a particular subject, guide them to the 904 Red Meat Exam module on the computer. The exams must be taken under your supervision. Remember that 80% is a passing score. After completion of all exams, send the trainee's file to HRDS for recording of the scores. Test scores will be confidential between the trainer, HRDS, and the trainee.
- Discuss the employee's training problems (e.g., incomplete modules, knowledge deficiencies, failure to develop skills) with the FSIS Training Center. You may call collect (409) 260-9433.
- Handle the employee's personnel problems (e.g. tardiness, AWOL, Leave, Travel, T&A) through normal supervisory channels.
- Complete the Training Report at the end of Step C in the employee's EDG. Draw a line through any sections that were not completed.

TECHNICAL OJT

Introduction

You have completed Step B and are now entering Step C, a four week on-the-job technical training step conducted at a designated training station under the direction of a designated trainer. Your trainer will assign you work in the various sections as necessary to develop your proficiency as a veterinary medical officer. Upon completion of Step C, you may not be able to meet all of the objectives stated in each section of this guide, but you should strive to meet as many as them as possible. By the end of Step E, you should be able to meet all of them.

This step consists of 12 sections. Each section consists of objectives, a module, and a progress sheet. The objectives describe what you should be able to do after completing the section. The objectives and the progress sheet can be found in the Employee Development Guide (EDG). The majority of the modules are not in this EDG but are in a Computer Based Training (CBT) format for viewing on a designated computer at the training station. The CBT modules consist of objectives, informational content in a multimedia format, and self-assessment sections. The objectives in each module describe what you should be able to do after completing the module. The content is a multimedia format integrating text, audio, video, and animations. At the end of each section of the CBT is a "Self Assessment" section in which you will be asked to answer some questions on the particular subject covered. This is not an exam, but it is designed to reinforce what you have just covered. The exam should be taken only after all materials in each particular module have been completed. At the end of each section is a "Sectional Progress Sheet" that your trainer will sign when you have completed that section. If during this training you are unable to meet certain objectives because of an acceptable reason, be sure to have your trainer write this on the appropriate progress sheet. An example of this would be that no sheep are slaughtered in your area, and it would be impractical to send you to a distant location to learn procedures that you weren't going to need in the near future.

The examinations you will take at the training station will be based on the instructional objectives in the modules. In the Step F assessment assignment, your progress will be assessed based on the objectives in this EDG.

Computer-Based Training (CBT) Module Procedures

This procedure outlines the use of the CBT modules for students in the 904 C/D section of the Veterinary Internship Program. At the conclusion of many of these modules, the trainee will demonstrate his/her knowledge by completing a test that will also be given in a computer format. Satisfactory completion of this module is demonstrated by attaining a score of not less than 80%.

These CBT modules have been designed for use in a designated training station with an assigned trainer. To be effective, this training must be a cooperative effort between the trainer, trainee and HRDS.

Materials

904 Veterinary Intern CD, 904 Prerequisite CD, 904 Testing CD, and Reference Library CD

Food Animal and Pathology References

Current FSIS Inspection Regulations

Current FSIS Inspection Manual

Current FSIS Directives

Current Livestock Carcass Disposition Review (Hard Copy)

Procedure

A. Orientation

These CBT modules are divided into sections. A Main Menu is provided in the Introduction for quick access to each of these sections. Each section also has a Table of Contents which may be accessed to move to a particular subject.

B. Module Viewing

For the initial viewing, each CBT is to be viewed in its entirety as it is designed to progress. After the entire CBT has been viewed, then the trainee may select certain portions that they wish to review. The Table of Contents can be accessed in each section by a conveniently placed button.

These CBT modules are designed to be interactive. In other words, the trainee has to do certain things (such as click on a button) to access all of the pictures, animation, video, and text. Be aware that buttons or links that are skipped may result in an item not being sufficiently covered. Because the trainee sets the pace of the progress through each CBT, it may be interrupted at any time. Bookmarks are available for placement if the CBT must be interrupted in the middle of a section.

Questions are usually presented at the end of each sub-section. These are not exams! The purpose of these questions is to review and reinforce the material presented in the preceding sub-section.

C. Evaluation

When the trainee has completed Steps A-B above, he/she should be adequately prepared for the test. The test is in a computer based format with multiple choice/true-false type of questions. It will require logging into the program with your name and SS number. You will be allowed one hour to complete the exam.

You will automatically receive the test score at the end of the exam. Test scores will be confidential between the trainee, trainer, and HRDS.

The following modules are NOT tested: Safety, FSIS Organization, Slaughter Overview, Lymphatics, Inspection Techniques, Sheep and Goat Inspection, Calf Inspection, Equine Inspection, Fabrication, Rendering, Coolers, Shipping and Receiving, Processed Products Overview and Exports.

Exam Protocol for Trainees

Upon completion of each tested module and related materials, you should make a request to your trainer to take the appropriate exam.

Your trainer will assist you in locating the 904DM exams on the computer. After entering the program, select the appropriate exam to take.

The program will require a login with the your name and SS number.

After login, proceed to the questions. The questions are in a multiple choice/True-False format. Simply click the left mouse button on the chosen answer and then click the DONE button on the lower left hand screen. You may change your answer up to the point of clicking DONE. After clicking the DONE button, the answer is locked in and you will be given feedback as to whether you chose the right answer or not.

Upon completion of the last question, the program will automatically put your final score on the screen. 80% is required for satisfactory completion of each module.

SECTION DESCRIPTION

General Section	2 days
FSIS Publications and Organizational Functions	
Poultry and Red Meat Slaughter Overview	
Safety Section	1/2 day
Sanitation Section	2 days
Antemortem Section	
Antemortem Inspection	
Humane Slaughter	
Postmortem Inspection Section	1 day
Anatomy Review	
General Postmortem Inspection Techniques	
Cattle Postmortem Inspection Section	3 days
Cattle Head Inspection	
Cattle Viscera and Carcass Inspection	
Swine postmortem Inspection Section	1 1/2 days
Sheep and Goat Postmortem Inspection Section	1/2 day
Calf Postmortem Inspection Station	1/2 day
Equine Inspection Section	1/2 day
Veterinary Livestock Dispositions (Part 1)	5 days
Introduction	
Septicemia-Toxemia	
Granulomatous Group	
Miscellaneous Group	
Parasitic and Pigmentary Group	
Neoplastic Group	
Viscera Separation Section	1 day
Control Section	1 day
Control of Inedible and Condemned Material	
Control of Restricted Product	
Reinspection Section	2 days
Carcass Reinspection	
Boneless Meats Reinspection	
Food Preparation, Preservation and Storage Section	4 days
Fabrication and Portion Control	
Overview of Processed Foods	
Edible Rendering and Refining	
Labeling and Marking	
Coolers, Shipping, and Receiving	
Export	

GENERAL (No examination required)

Instructions

Complete the Overview of FSIS Publications and Organizational Functions module.

Complete the Poultry and Red Meat Slaughter Overview module.

Review the completed modules with your trainer.

Have your trainer sign the sectional progress sheet for this section.

SECTIONAL PROGRESS SHEET

(General)

Dr. _____ completed this
general section that consisted of the following:

Completing the Overview of FSIS Publications and Organizational Functions module.

Completing the Poultry and Red Meat Slaughter Overview module.

Comments:

If the employee did not complete everything in this section, list what was not completed and explain why.

Explanation:

Signature (Trainer)

Date

SAFETY (No examination required)

Instructions

Read the safety objectives.

Review the Knife Sharpening information in Step B of this EDG.

View and listen to the Knife Sharpening filmstrip/tape.

Review the Safety information in Step B of this EDG.

Complete the Safety for FSIS Supervisors module.

Review the completed module with your trainer.

Demonstrate to your trainer your ability to perform the objectives in this section.

Have your trainer sign the sectional progress sheet for this section.

Objectives

Upon completion of the section of training, you will be able to:

- _____ Maintain a scabbard, knife, hook, and steel of sanitary construction and properly guarded, as applicable.
- _____ Sharpen and handle a knife safely and properly.
- _____ Prepare your steel so that it is usable for steeling a knife.
- _____ Steel a knife correctly and safely as demonstrated by your trainer.
- _____ Determine the effect of the steeling motions on the cutting edge of the knife. The edge may be centered compared to the knife blade, or it may be angled to one side.
- _____ Detect pits and rough areas on the knife edge.
- _____ Test a sharpened, steeled knife to check its acceptability. Your trainer will demonstrate an acceptable testing method.
- _____ Identify, describe, and report potential safety hazards in the work place.
- _____ Assure that appropriate and timely preventive and/or corrective measures are taken to eliminate potential safety hazards.
- _____ Evaluate the preventive and/or corrective measures taken to eliminate potential safety hazards.
- _____ Evaluate the timeliness and effectiveness of measures taken to eliminate potential safety hazards.
- _____ Prepare concise, accurate and complete accident reports.

KNIFE EXAMPLE DIAGRAM GOES HERE

1. KNIFE SHARPENING—GRINDING DIAGRAM GOES HERE

2. *KNIFE SHARPENING—HONING DIAGRAM GOES HERE*

3. *KNIFE SHARPENING—STEELING DIAGRAM GOES HERE*

SECTIONAL PROGRESS SHEET (Safety)

Dr. _____ completed this introductory section that consisted of the following:

Reading the Knife Sharpening and Safety objectives.

Reviewing the Knife Sharpening information in Step B of this EDG.

Viewing and listening to the Knife Sharpening filmstrip/tape.

Reviewing the Safety information in Step B of this EDG.

Completing the Safety Overview for FSIS Supervisors module.

Reviewing the completed module with me.

Demonstrating his/her ability to perform the objectives in this section.

Comments:

If the employee has not met all of the objectives, describe the objectives that were not met and explain why they were not met.

Explanation:

Signature (Trainer)

Date

SANITATION (Examination required)

Instructions

Read the objectives for this section.

Review the sanitation information in Step B of this EDG.

Complete the Sanitation CBT module.

Discuss the module with your trainer.

Demonstrate to your trainer your ability to perform the objectives including the passing of the exam.

Have your trainer sign the sectional progress sheet for this section.

Objectives

When you complete this section of training, you will be able to insure that a satisfactory standard of sanitation is maintained throughout the plant by:

- _____ Performing a systematic sanitary inspection of the plant's floors, walls, equipment, ceilings, and outside premises for cleanliness.
- _____ Monitoring the plant personnel for cleanliness.
- _____ Monitoring the use and function of equipment and facilities.
- _____ Detecting conditions that will adversely affect the product.
- _____ Insisting that the equipment and utensils are clean, the air circulation is adequate, the windows and other openings are properly screened, and the excessive vapors and odors are eliminated.
- _____ Inspecting meat and nonmeat items for contamination.
- _____ Using laboratory reports to determine if meat and nonmeat items are free from contamination.
- _____ Monitoring and evaluating the plant's slaughtering practices and procedures.
- _____ Identifying and describing the type of contamination on a carcass.
- _____ Monitoring and evaluating the plant's food handling practices and procedures.
- _____ Collecting and submitting a water potability sample.
- _____ Monitoring and evaluating the plant's cleaning and sanitizing compounds and procedures.

- _____ Monitoring and evaluating the plant's pest control programs.
- _____ Assuring that appropriate and timely preventive or corrective measures are taken following an acceptance or nonacceptance decision.
- _____ Comparing the location of equipment and facilities with the official blueprints.
- _____ Preparing concise, accurate, and complete sanitation reports based on the findings.
- _____ Evaluating the preventive and/or corrective action taken to determine its accuracy, timelines, and effectiveness.

SECTIONAL PROGRESS SHEET (Sanitation)

Dr. _____ completed this section
that consisted of the following:

Reading the objectives for this section.

Reviewing the sanitation information in Step B of this EDG.

Completing the Sanitation CBT module.

Discussing the completed module with me.

Demonstrating his/her ability to perform the objectives including the passing of the exam.

Comments:

If the employee has not met all of the objectives, describe the objectives that were not met and explain why they were not met.

Explanation:

Signature (Trainer)

Date

ANTEMORTEM (Examination required)

Instructions

Read the objectives for this section.

Review the Antemortem information in Step B of this EDG.

Complete the Antemortem CBT module.

Complete the Humane Slaughter CBT module.

Discuss the completed modules with your trainer.

Demonstrate to your trainer your ability to perform the objectives including the passing of the exam.

Have your trainer sign the sectional progress sheet for this section.

Objectives

When you complete this section of training, you will be able to permit the slaughter of only those animals that yield meat or meat food products that are healthful, safe from harmful chemical and drug residues, and consistent with the consumer's sense of decency by:

- _____ Performing a visual examination of the entire animal at rest and in motion (from both sides), palpating, and taking temperatures when indicated.
- _____ Identifying animals that appear normal; animals with unacceptable conditions; animals with pathological conditions that require the recording of information for a sound postmortem disposition; animals with pathological conditions that make them unfit for human food; animals with symptoms of reportable diseases; and animals with pathological conditions on antemortem that may not be detected during postmortem inspection, such as chemical poisoning and diseases affecting the central nervous system.
- _____ Determining the acceptability for slaughter of animals with unacceptable and/or pathological conditions.
- _____ Determining that animals have the proper certification as required.
- _____ Using the identification system that identifies the animals that have received antemortem inspection and have been found acceptable for slaughter.
- _____ Requiring that the diseased animals be handled carefully to avoid unnecessary contamination of the slaughtering department.
- _____ Directing the retention of animals when necessary.

- _____ Directing the identification of animals designated as “U.S. Suspects” or “U.S. Condemned.”
- _____ Completing and distributing the FSIS Form 6200-16 and the FSIS Form 6150-1.
- _____ Determining the acceptability of the facility for humane animal handling.
- _____ Determining if the animals are handled in compliance with the humane handling of livestock law.
- _____ Monitoring and enforcing the humane handling of livestock law.
- _____ Monitoring and enforcing antemortem sanitation requirements.

SECTIONAL PROGRESS SHEET (Antemortem)

Dr. _____ completed this section
that consisted of the following:

Reading the objectives for this section.

Reviewing the Antemortem information in Step B of this EDG.

Completing the Antemortem CBT module.

Completing the Humane Slaughter CBT module.

Discuss the completed modules with me.

Demonstrating his/her ability to perform the objectives including the passing of the exam.

Comments:

If the employee has not met all of the objectives, describe the objectives that were not met and explain why they were not met.

Explanation:

Signature (Trainer)

Date

POSTMORTEM INSPECTION (No examination)

Instructions

Read the objectives for this section.

Review the Inspection Anatomy information in Step B of this EDG.

Complete the Review of the Lymphatic System module.

Complete the General Postmortem Inspection Techniques module.

Review the completed modules with your trainer.

Demonstrate to your trainer your ability to perform the objectives in this section.

Have your trainer sign the section progress sheet for this section.

Objectives

When you complete this section of training, you will be able to:

- _____ Locate, identify, and name the lymph nodes used in routine postmortem inspection in cattle, swine, sheep, goats, calves, and/or equines.
- _____ Locate, identify, and name the organs inspected during routine postmortem inspection in cattle, swine, sheep, goats, calves and/or equines.
- _____ Locate, identify, and name the tissues inspected during routine postmortem inspection in cattle, swine, sheep, goats, calves, and/or equines.
- _____ Demonstrate the proper postmortem inspection techniques of observation, incision, palpation, and olfaction.

SECTIONAL PROGRESS SHEET (Postmortem Inspection)

Dr. _____ completed this section that consisted of the following:

Reading the objectives for this section.

Reviewing the Inspection Anatomy information in Step B of this EDG.

Completing the Review of the Lymphatic System module.

Completing the General Postmortem Inspection Techniques module.

Reviewing the completed modules with me.

Demonstrating his/her ability to perform the objectives in this section.

Comments:

If the employee has not met all of the objectives, describe the objectives that were not met and explain why they were not met.

Explanation:

Signature (Trainer)

Date

CATTLE POSTMORTEM INSPECTION (Examination required)

Instructions

Read the objectives for this section.

Read the Cattle Postmortem Inspection information in this step of the EDG.

Complete the Cattle Inspection CBT module.

Discuss the completed modules with your trainer.

Demonstrate to your trainer your ability to perform the objectives including the passing of the exam.

Have your trainer sign the sectional progress sheet for this section.

Objectives

When you complete this section of training, you will be able to pass only those cattle carcasses that yield meat or food products that are healthful, safe from harmful chemical and drug residues, and consistent with the consumer's sense of decency by:

_____ Performing postmortem inspection on carcasses and parts, organs and body tissues for evidence of disease, parasitic infestations, biological residues, or other conditions that could render the carcasses or parts unfit for human food.

_____ Performing the head inspection procedures according to the MPI Regulations and the MPI Manual.

_____ Observing the head for evidence of unacceptable conditions, diseased conditions, and/or improper presentation.

_____ Using a knife and hook to locate and expose the following pairs of lymph nodes: medial retropharyngeal (suprapharyngeal), mandibular, parotid, and lateral retropharyngeal (atlantals) if present.

_____ Using a knife and hook to slice the lymph nodes thin enough to expose all sections.

_____ Observing the cut surfaces of the sliced lymph nodes for evidence of unacceptable and/or pathological conditions.

_____ Using a knife and hook to slice the muscles of mastication by dividing the muscle from the angle of the mandible as far as possible without detaching it from the head or cutting into the aponeurosis.

_____ Observing the cut surfaces of the muscles for evidence of unacceptable and/or pathological conditions.

- _____ Observing and palpating the entire tongue for evidence of unacceptable and/or pathological conditions such as ulcers, lacerations, abscesses, cacti, etc.
- _____ Insuring that each head is identified with a tag bearing a number identical to that attached to the carcass for identification purposes.
- _____ Performing the viscera inspection procedures according to the MPI Regulations and the MPI Manual.
- _____ Observing the viscera for evidence of unacceptable conditions, diseased conditions, and/or improper presentation.
- _____ Using a knife to locate and expose the following lymph nodes: caudal (posterior), middle, and cranial (anterior) mediastinal lymph nodes, the right and left tracheobronchial (bronchial) lymph nodes, and the portal lymph nodes.
- _____ Using a knife to slice the lymph nodes thin enough to expose all sections.
- _____ Observing the cut surfaces of the sliced lymph nodes for evidence of unacceptable and/or pathological conditions.
- _____ Using a knife to incise the left ventricle and interventricular septum of the heart.
- _____ Observing and palpating the dorsal (curved) surface and observing the ventral surface of lungs and observing and palpating all surfaces of the liver.
- _____ Palpating the junction of the rumen and reticulum to determine whether there are abscesses at this point.
- _____ Palpating or incising, if necessary, the mesenteric lymph nodes, paunch, spleen, esophagus, and other viscera.
- _____ Performing the cattle carcass inspection procedures according to the MPI Regulations and the MPI Manual.
- _____ Detecting improper presentation such as kidneys not exposed, hide and surface contaminants (hair, grease, pus, dirt, ingesta), viscera left in the carcass, and lymph nodes not presented for inspection.

- _____ Detecting pathological conditions such as actinomycosis, arthritis, abscesses, nephritis, fractures, pleuritis, peritonitis, neoplasms, bone abnormalities, pigmentary conditions, parasitic conditions, eosinophilic myositis, bruises, and wounds.
- _____ Detecting unacceptable conditions such as injection sites.
- _____ Differentiating unacceptable conditions, pathological conditions, and/or improper presentations that can be removed on the line from unacceptable conditions, pathological conditions, and/or improper presentations that should be retained.
- _____ Directing the removal of certain unacceptable conditions, certain diseased conditions, and/or certain improper presentations.
- _____ Retaining the head and/or the viscera and/or the carcass for certain unacceptable conditions, certain pathological conditions, and/or certain improper presentations.
- _____ Removing the retain tag from properly trimmed carcasses retained because of localized conditions, provided inspection does not reveal extension of the condition.

CATTLE POSTMORTEM INSPECTION

Sequence of Inspection

The postmortem inspection of cattle is divided into three parts:

- Head inspection
- Viscera (internal organs) inspection
- Carcass inspection

During each part, specific tissues of the animal must be examined in a specific order. There are minor variations in the sequence of the inspection from plant to plant, but *no part that is required to be inspected may be missed*. Minor variations in the details of the sequence of inspection are necessary because of the differences in packing plant designs and types of equipment. Also, *the inspection of additional parts may be necessary*.

The sequence of inspection of the various required parts depends greatly on the way they are presented for inspection. In smaller plants, for example, one inspector may examine the head, internal organs, and carcass of each beef animal slaughtered. In these plants, all the parts are usually presented for inspection in one location so the inspector can check all the required parts quickly without having to walk very far. In larger plants, there may be one or more inspectors examining each of the three parts (head, viscera, and carcass). To give the inspectors enough working room, the “inspection stations” (inspectors’ work areas) are separated.

Uniformity of Presentation

Regardless of the method of presentation for inspection of the parts, the presentation is consistent from animal to animal. In other words, each part to be inspected (each head, each set of viscera, or each carcass) is placed in the same position before it is ready for the inspector to examine. This permits the inspector to perform the inspection routine on each part in the same sequence each time, thus increasing the speed of the procedure while reducing the chances that the inspection of some required tissue will be inadvertently overlooked.

Sanitation

In addition to uniformity of presentation for inspection, the cleanliness of the dressing operation is also a factor influencing the inspection routine. Tissues and organs contaminated with intestinal contents and other contaminants must not be left uninspected just because they are contaminated. If they were left uninspected, a condition that may have a bearing on the fitness of the whole carcass for human food may go undetected, being hidden by the contaminating material. After inspecting contaminated parts, the inspectors must thoroughly clean and sanitize their hands and their equipment before examining the next part. Otherwise the contaminants and organisms that might have the potential for causing human disease would be transferred from part to part as the slaughter progressed. Thorough cleaning and sanitizing takes time, so it is to the advantage of the plant to present all parts for inspection as uniformly and free of contamination as possible.

**Cattle Head
Inspection--
Introduction**

Head inspection is performed first, before either viscera or carcass inspection. The method of cattle slaughter used by the packing plant is designed to assure that the MPI Inspectors have enough time to inspect the head before the viscera and carcass from the same animal are inspected.

Why is the head inspected first?

A reason very important to inspection is the surprisingly large number of diseases and conditions that show up in the head, even though they begin in, and affect, other parts of the body. By inspecting the head first, the inspector can screen out early in the plant's slaughtering process those carcasses that need to be examined by the veterinarian. These carcasses and parts are then diverted to the "veterinary disposition area," a location separate from the areas used to dress the other carcasses and parts. By having these carcasses and part removed from the product flow early, their tissues and fluids cannot contaminate the subsequent areas, equipment, and people used to prepare the other carcasses and parts for food.

**Cattle Head
Inspection--
Methods**

Due to the different designs of cattle slaughter plants, there are three established methods of cattle head inspection. You will perform one of them at your assigned training plant. Hopefully, you will see and be able to try the other methods also. The more the better.

The names of the three methods of cattle head inspection are as follows:

Tongue In. The tongue has not been removed from the head when the head is first presented for inspection, although it is removed from the head later.

Tongue Out, Base Up. The tongue has been removed from the head and is hanging beside the head on a hook by its base (the part farthest back in the head).

Tongue Out, Base Down. The tongue has been removed from the head and is hanging beside the head on a hook by its tip. (This is sometimes called the "tongue out, tip up" method).

Examine the following diagrams of the cattle head presentations for inspection.

CATTLE HEAD INSPECTION METHODS DIAGRAMS GO HERE

In addition, the heads may be on a stationary stand (head rack) or on a moving chain. Try to see as many different layouts as you can as you progress through your training and your career.

Again, regardless of the presentation for inspection, the same tissues are always examined and some may be added due to local conditions. *No required step may be omitted.*

The diagrams used in the following descriptions are included to give you an idea of what to expect when you first “try the line” with your trainer. Concentrate on learning the new anatomical terms so you can understand your trainer’s descriptions of the procedures, tissues, and findings. It will also help you to know the sequence of the cattle head inspection steps before you try inspection for the first time. The sequence of inspection steps for all three methods of presentation is included in the following material, and it will help you to learn all of them since they are similar. The repetition of the technical terms will help you learn these new and unfamiliar words.

**Tongue-In
Presentation**

The head is basically a six-sided odd shaped “square” attached to the neck and body.

TONGUE-IN PRESENTATION DIAGRAM GOES HERE

Each of the six sides has a name with which you are probably familiar.

HEAD DIAGRAM GOES HERE

Naming these sides on the six-sided odd-shaped square would look like this.

LABELED HEAD DIAGRAM GOES HERE

Although the cattle head inspector examines all six sides of the head, the most familiar inspection view is that of the back of the head, (6). It's also the view that you probably have never seen before unless you have previously been exposed to cattle slaughter. The back of the head is important because all of the lymph nodes required to be inspected are located in the vicinity of this back surface! The tongue is located between the bottom jawbones with its base by the neck and its tip by the front teeth, just as yours is. The cheek muscles (muscles of mastication) are attached to the bottom jawbones, like yours.

Cattle head inspection following the “tongue-in” method takes place in two steps. First the head and lymph nodes are examined by the inspector (Step One). Then a plant employee “drops” the tongue (cuts it loose from between the bottom jawbones, and lets it hang down from the bones holding the bottom teeth). Then the inspector examines the cheek muscles and the tongue (Step Two).

Trace the sequence of inspection steps in the diagrams which follow:

First, the inspector checks all the surfaces of the head rapidly, looking for abnormalities, contamination, and disease.

DIAGRAM GOES HERE

Then the cervical lymph nodes are incised. The order of incision of the nodes depends on the direction of travel of the head chain, or the flow of product if stationary head racks are used. Your trainer will show you what is done at this plant. The objective is to examine each node as quickly, completely, and safely as possible.

The back of the cattle head, when presented tongue in, is diagrammed like this:

TONGUE-IN DIAGRAM GOES HERE

...and represents the back view of the cattle head like this:

BACK VIEW DIAGRAM GOES HERE

Certain “landmarks” will stand out clearly and are ready reference points between you and your trainer. Learn them! Lymph nodes look very similar to the surrounding salivary gland and fat tissue!

FOUR LANDMARKS DIAGRAM GOES HERE

The lymph nodes that are now incised and examined after observation of the head are located as follows (the black dots):

INCISED LYMPH NODES DIAGRAM GOES HERE

You will be expected to know the names of these eight lymph nodes (actually four pairs) and be able to find and correctly incise them.

Their names are:

- Left and right *parotid* lymph nodes
- Left and right *mandibular* lymph nodes
- Left and right *medial retropharyngeal* (suprapharyngeal) lymph nodes
- Left and right *lateral retropharyngeal* (atlantal) lymph nodes

Their locations are:

LYMPH NODE LOCATION DIAGRAM GOES HERE

Remember that these are diagrammatic representations of the actual tissues. Your trainer here at the plant will show you the actual tissues. Learn to associate the diagram and the real thing.

At this point learn the names of the lymph nodes and landmarks. Keep referring to this part as you progress through learning the cattle head inspection routine.

To here you have completed the *first step* of the “tongue-in” presentation. You have:

- Examined all the surfaces of the head, and
- Incised and examined the eight required lymph nodes.

Now a plant employee will “drop” the tongue—cut it loose from its attachments to the head and lower jaw bones. It will be suspended from the bones holding the front bottom teeth and washed clean. You will see this:

DROPPING THE TONGUE DIAGRAM GOES HERE

The *second step* of the tongue-in presentation now takes place. The four cheek muscles (two pairs) are incised and examined. The tongue is observed and palpated.

Your trainer will demonstrate the correct incising technique on the four cheek muscles. The muscles are:

- Left outer cheek muscle
- Left inner cheek muscle
- Right outer cheek muscle
- Right inner cheek muscle

CHEEK MUSCLE DIAGRAM GOES HERE

Now observe and palpate the tongue correctly from tip to base.

Slicing cheeks is a skill and is difficult at first. Do not be concerned with perfection but do be able to tell when you are incising correctly and when you are not. Never use a dull knife! Speed is not important at this point.

Keep checking with your trainer to determine your progress.

For your reference, here is a summary of the tongue-in method of cattle head inspection.

1. Inspect all surfaces of the head.
2. Incise and examine the lymph nodes.

Left and right parotids.

Left and right medial retropharyngeals (suprapharyngeals).

Left and right mandibulars.

Left and right lateral retropharyngeals (atlantals).

Then a plant employee drops the tongue.

3. Incise and examine the cheek muscles:

Left and right outside cheek muscles.

Left and right inside cheek muscles.

4. Observe and palpate the tongue.

Remember, the order in which the tissues are inspected varies with the direction of flow of the heads and the plant size. The order used is the fastest, safest, most sanitary way to accomplish the inspection without missing anything.

Tongue-Out, Base-Up Presentation

When the heads are presented in the tongue-out, base-up position, the tongue and its tissues have already been removed from the head bones and tissues. Usually, the head and its tongue are hanging side by side so that the inspectors will know which tongue belongs to which head. However, the tongue may be in front of the head or behind it as the product flows. The heads and tongues also may be on a moving chain or on a stationary rack.

When the tongue is removed from the rest of the head, the medial retropharyngeal (suprapharyngeal), mandibular, and lateral retropharyngeal (atlantal) lymph nodes are in the tissues attached to it. Of the lymph nodes, only the pair of parotid nodes

remain on the head. The cheek muscles remain attached to the head bones, also. The tongue-out, base-up presentation is represented diagrammatically as follows:

TONGUE-OUT, BASE-UP PRESENTATION DIAGRAM GOES HERE

The sequence of inspection of the head tissues, lymph nodes, cheek muscles, and tongue is determined by the direction of movement of the product and whether the tongue is in front of the head or behind it. Usually the “leading” tissues are examined first and the “trailing” tissues are examined last. Your trainer will show you the sequence of inspection if this presentation is used at this plant.

**Tongue-Out,
Base-Down
Presentation**

This presentation is sometimes called “tongue-out, tip-up.” The inspector sees the tongue tissues and the head separated, and the tongue hanging by its tip (point). Again, as in the tongue-out, base-up position, the medial retropharyngeal (suprapharyngeal), mandibular, and lateral retropharyngeal (atlantal) lymph nodes are in the tongue tissues, while the parotid lymph nodes and cheek muscles remain on the head. The diagram appears as follows:

TONGUE-OUT, BASE-DOWN PRESENTATION DIAGRAM GOES HERE

Your trainer will show you the sequence of inspection if this presentation is used at this plant.

**Cattle Viscera
Inspection--
Introduction**

Cattle viscera are presented for inspection in a viscera truck or on a moving table. Regardless of the presentation, certain tissues are always examined, although the sequence (order) may vary. Also, additional tissues may be added to the inspection routine depending on local conditions.

Briefly, here is what happens:

- The carcass is observed before the viscera are examined.
- The viscera are observed.
- Specific visceral lymph nodes and structures are incised and palpated.

The “viscera” actually includes the contents of the abdominal and thoracic cavities, plus the various “tubes” that lead into and out of some of the organs in these cavities.

THE CAVITIES DIAGRAM GOES HERE

THORACIC CAVITY DIAGRAM GOES HERE

The Digestive Tract. Its parts are the esophagus (weasand), beginning in the head and neck, progressing through the thoracic cavity and diaphragms, then ending at the stomach; the stomach, in the abdominal cavity; the small intestines, cecum, and large intestines in the abdominal cavity; then the rectum, in the pelvic canal; and the anus, or exit. In packing house terminology, the contents of the pelvic canal, including the rectum, anus, and urethra, are known as the “bung.”

DIGESTIVE TRACT DIAGRAM GOES HERE

The Urinary Tract. Located in the abdominal cavity, it consists of the kidneys and urinary bladder. The exit to the urinary bladder, the urethra, goes through the pelvic canal. In the female, it is short and ends by the anus. In the male, the urethra is long, and after going through the pelvic canal to the anal area, it curves downward between the hind legs ending under the belly. Its packing house name is “pizzle.”

***MALE AND FEMALE URINARY TRACT DIAGRAMS
GO HERE***

The Reproductive Organs. Actually, only the reproductive organs of the female are in the abdomen. They are very small and are located by the urinary bladder in the nonpregnant female. The exit is through the pelvic (or “birth”) canal. The uterus, the part that carries the unborn calves, varies in size with the length of pregnancy in pregnant cows. In the male, the reproductive organs (testicles) have usually long since been removed. When present they are usually considered as part of the “viscera” even though they are not normally located in the visceral cavities.

The Other Visceral Structures (Incomplete List). These include the liver, the spleen (melt), the caul (omental) fat, and the sweetbreads (thymus gland).

The diagrams illustrate the relative locations of some of the visceral structures and are included to give you practice at using the names and visualizing the diagrammatic representations of the structures. Structures not diagrammed in these pictures will be illustrated as the description of the cattle viscera inspection routine progresses.

Remember, try to learn the terminology so that you can understand your trainer’s descriptions and instructions.

Cattle Viscera Inspection-- Sequence

When the steps in the cattle inspection routine were briefly described, the following statement was made: “The carcass is observed before the viscera are examined.” Why?

First, there may be some condition obvious on the outside of the carcass that calls for immediate action by the inspector. A disease or abnormality may be present requiring retention of the carcass and all of its parts rather than requiring the inspector to examine the viscera. The inspector sets in motion the procedure used to identify and retain all the parts, including the head, of the affected animal. He or she then removes them from the slaughter area to the veterinary disposition area for examination by the veterinarian. Parts of the carcass may need trimming or cleaning before the plant employees continue dressing them. The inspector has the appropriate plant employees take the appropriate action in these cases, too. You will see specific examples of these actions by inspectors during your training.

Second, there may be some condition in the inside of the carcass that calls for immediate action by the inspector. The inside of the carcass may be thought of as a “container” for the viscera. The abdominal “container” is lined with peritoneum and the thoracic “container” is lined with pleura. These membranes should be thin and clear, like the transparent food wraps you see around sandwiches and other foods. If these membranes are thickened or cloudy, or covered with pus, or the cavities have an excessive amount of ill-smelling fluid in them, again there is no reason for the inspector to contaminate the surroundings by examining the viscera. Instead, the inspector retains the carcass and all its parts, and has them removed to the veterinary disposition area. Any diseased tissues or spilled fluids are immediately cleaned up and all equipment in contact with them is sanitized before the next carcass and viscera are examined.

**Cattle Viscera
Inspection--
Procedure**

After the carcass is checked, the viscera are observed. Again, if there is anything present obviously requiring veterinary examination, the inspector has the carcass, head, viscera, and all other parts diverted to the veterinary disposition area. The least amount of contamination of the slaughter facilities and equipment, the better!

Actually, among young fat cattle in the regular day's kill, very few animals have conditions that would cause them to be diverted to the veterinary disposition area before viscera inspection. As with the routine inspection of the other parts of the animals, the order of inspection of the different visceral parts may vary, but no part requiring inspection may be missed, and other structures may be added as local conditions dictate. Your trainer will show you what is done at this plant.

You will be expected to know the names of the structures examined during viscera inspection, and whether they are incised or palpated. All are observed! Read through the descriptions which follow. A summary for your convenience is included at the end.

Routine Inspection of the Cattle Pluck (Lungs and Heart). The left and right lungs are joined together in the middle by a fold of fatty connective tissue extending the entire length of the thoracic cavity. This fold, called the mediastinum, also anchors the lungs to the backbone, diaphragm, and other structures. In the mediastinum are the lymph nodes, which, when abnormal, alert the inspector to take appropriate action. The inspector carefully incises and observed five lymph nodes related to the lungs and mediastinum. These five lymph nodes are:

1. Caudal (posterior) mediastinal lymph node
2. Middle mediastinal lymph node
3. Cranial (anterior) mediastinal lymph node
4. Right tracheobronchial (bronchial) lymph node
5. Left tracheobronchial (bronchial) lymph node

Examine the following diagram:

LYMPH NODE DIAGRAM GOES HERE

In addition to incising and observing the mediastinal and bronchial lymph nodes, observe both surfaces (curved and flat) of *both* lungs and palpate the *curved* surfaces of *both* lungs deeply and thoroughly for signs of disease. Your trainer will demonstrate this technique.

Then the heart is cut open.

The heart has two large chambers, or ventricles, and two small chambers. To open the heart, incise lengthwise (base to tip or tip to base) through the left or thick-walled ventricle. Then incise lengthwise through the wall which separates the left and right large chambers. Follow the procedure on the diagrams.

HEART INCISION DIAGRAM GOES HERE

DIAGRAM OF OPENED HEART GOES HERE

As necessary, longitudinal incisions are made in the cut edges of both the thick left heart wall and the thick wall that separates the two ventricles to detect specific diseases. Details of these procedures are outlined in the classroom sessions. Observe all the tissues for abnormalities in addition to making the specifically required incisions.

Routine Examination of the Cattle Liver. First the hepatic lymph nodes on the liver are carefully incised and observed.

CATTLE LIVER LYMPH NODES DIAGRAM GOES HERE

Second, the bile ducts are cut open in both directions as far as possible. Your trainer will demonstrate this technique.

BILE DUCT INCISION DIAGRAM GOES HERE

Among the functions of the liver is the production of bile (gall), a thick greenish liquid that empties into the small intestine to aid in the digestion, primarily of fats. The individual microscopic liver cells produce the bile, and it collects through a network of progressively larger and larger tubes resembling blood vessels, and finally empties into the gall bladder. Here the bile fluid awaits the stimulation of fatty foods in the small intestine, at which time it is emptied into the intestine by contractions of the gall bladder. The bile ducts (collection tubes between the liver cells and the gall bladder) are examined for diseases that, if present, make the liver unfit for human food.

Third, both sides of the liver are palpated deeply for abnormalities. Deep palpation is particularly necessary to detect abscesses (which feel like lumps.) The renal impression of the liver is required to be palpated specifically, since abscesses are common at this site and are often hidden from view.

LIVER PALPATION DIAGRAM GOES HERE

To recap the routine inspection of the cattle liver—

1. Incise the hepatic lymph nodes.
2. Open the bile ducts as far as possible in both directions.
3. Observe and deeply palpate both sides of the liver, the flat surface, and after turning the liver over, the curved surface. Don't forget to run your fingers in the renal impression, palpating deeply for abscesses and other abnormalities.

Routine Inspection of the Digestive Tract. This routine varies depending on which parts of the digestive tract the packing plant saves as edible. Your trainer will explain what is done at this plant.

In most cases, the following is the minimum inspection required of the digestive tract when no parts are saved for use as human food.

First check the esophagus (weasand) tie (it should be tied or knotted closed) for leakage of paunch content on the stomach and intestines. Also, check the “bung tie.” The rectum and urethra from the urinary bladder are usually tied off to prevent leakage of their contents on the digestive organs. In some plants the packers elect to remove the urinary bladder instead of tying it off. Your trainer will show you any alternate procedures used at your training plant.

These and other “ties” are made to prevent the spillage of paunch, intestinal, and urinary bladder contents on parts that may become food for people. Many of the organ and carcass surfaces that you see on the kill floor end up in the grocery store and ultimately on the consumer’s plate. In addition, the viscera must be inspected. The presence of digestive tract content on the viscera may hide conditions that have a bearing on the suitability of the carcass and parts for use as human food. Inspecting contaminated viscera requires extra time since the hands, clothing, equipment, and facilities involved must be cleaned and sanitized before the next parts are inspected. Otherwise potentially disease-causing organisms and material would be transferred from one carcass and viscera set to succeeding ones. Cleanups between carcasses and sets of viscera take up valuable time. Therefore the importance of sanitary dressing techniques and extreme care cannot be overemphasized. Considering the thin walls of the digestive tract and the delicacy of the visceral tissues, one must respect the skill of a plant carcass eviscerator who, hour after hour, can cleanly remove the huge mass of viscera inside the average beef animal.

Second, examine the cranial and caudal mesenteric (mesenteric) lymph nodes in the spread mesentery. Then, third, deeply palpate the rumino-reticular junction where the esophagus (weasand) enters the paunch. Palpate a wide area deeply; it is a common site for abscesses. It is often referred to as the R-R junction.

Visualize the inspection of the abdominal viscera and the location of the R-R junction from this diagram:

***RUMINO-RETICULAR JUNCTION DIAGRAM GOES
HERE***

The sequence of inspection of the various structures will be different according to the plant layout and what parts are saved as edible. Inspectors receive instructions from their supervisors at each new plant to which they are assigned so that they will know exactly what to do.

Routine Inspection of Other Visceral Parts. Again, this varies from plant to plant. The spleen (melt) is always carefully observed. If the kidneys and sweetbreads or other parts are placed with the rest of the viscera, they are examined also. The uterus is observed and the testicles from bulls are inspected if they are to be saved for use as human food.

**Cattle Viscera
Inspection--
Summary**

First, observe the carcass inside and outside as required by the procedure followed at this plant.

Second, glance over the viscera for obvious abnormalities

Then,

On the pluck:

- Incise and observe the mediastinal and tracheobronchial (bronchial) lymph nodes.
- Open and observe the heart.
- Observe both surfaces of the lung and palpate the curved surface.

On the liver:

- Incise and observe the hepatic lymph nodes.
- Open the bile duct in both directions.
- Palpate both surfaces of the liver and the renal impressions.

On the paunch:

- Observe the “ties,” the esophagus, and the bung.

And intestines:

- Observe the cranial and caudal mesenteric (mesenteric) lymph nodes along with the intestines and cecum.
- Palpate the rumino-reticular junction

On the other parts:

- Observe the spleen and other parts presented for viscera inspection.

Remember that all plant slaughter procedures and inspection procedures must be approved by FSIS officials before they are used. Also, remember that any and all parts separated from the carcass must be kept *positively identified* as belonging to that specific carcass until after *all* phases (head, viscera, and carcass) of inspection have been completed. This positive identification of all separated parts is necessary in case the carcass and its parts need to be retained for examination by the veterinarian.

**Cattle Carcass
Inspection--
Introduction**

There are two methods of performing carcass inspection. The same tissues are examined in each case. One method is performed in two steps, each at a different time, and the other is performed in one step. The method used is selected after consideration of the plant's facilities and rate of slaughter.

In the cattle viscera inspection routine, part of the carcass was examined first, before the viscera. This is called *hindquarter inspection*. After the viscera is inspected, inspection of the carcass is completed by performing *forequarter inspection*. On very fast kills, the viscera inspectors may not do any carcass inspection at all. All carcass inspection is handled by a separate carcass inspector in this case, and the routine performed is called *complete* carcass inspection.

In no case is any step in the carcass inspection routine ever omitted!

**Cattle Carcass
Inspection--
Methods**

Follow the diagrams to sort out the carcass procedures in your mind. Later, your trainer will show you what is done at this plant.

1. When hindquarter and forequarter inspection are performed at *different* times (the most common situation).

First: Hindquarter inspection is performed on the high part of the carcass as it hangs. Hindquarter inspection is performed on the unsplit carcass *before* viscera inspection.

HINDQUARTER INSPECTION DIAGRAM GOES HERE

Second. Viscera Inspection

VISCERA INSPECTION DIAGRAM GOES HERE

Third. After the carcass is split—*forequarter* inspection is performed. Forequarter inspection is performed on *both* sides of *both* halves on each carcass after the carcass is “split” (cut in half).

FOREQUARTER INSPECTION DIAGRAM GOES HERE

Recap

Hindquarter carcass inspection → Viscera Inspection → Carcass is split by a plant employee → *Forequarter* carcass inspection

2. The *complete* carcass inspection routine. All carcass inspection procedures are accomplished at the same time (usually on large, high-speed operations with separate carcass inspection stations).

The complete carcass procedure is usually performed after the carcass has been split. It is performed on both halves—both sides (inside and outside) of each half. The inspector actually has to look at four sides (left inside, left outside, right inside, and right outside) to completely examine one carcass!

**Cattle Carcass
Inspection—
Hindquarter
Inspection**

The following is a list of the steps in the hindquarter inspection routine.

1. Observe the back of the skinned carcass while eviscerated.
2. Palpate the scrotal (superficial inguinal) or mammary (supramammary), and medial (internal) iliac lymph nodes.
3. Observe body cavities.

Follow the diagrams to visualize the procedures used in inspection.

HINDQUARTER INSPECTION DIAGRAM GOES HERE

**Cattle Carcass
Inspection—
Forequarter
Inspection**

The following is a list of steps in the forequarter inspection routine.

1. Observe the cut surface of muscle and bones, diaphragm's pillars, and peritoneum
2. Observe and palpate kidneys and diaphragm.
3. Observe pleura, neck and carcass exterior.

Forequarter inspection completes the carcass inspection procedures started with hindquarter inspection. It is performed after the carcass is split, but prior to the washing of the carcass halves.

Follow the diagrams to visualize the procedures used in inspection.

FOREQUARTER INSPECTION DIAGRAM GOES HERE

**Cattle Carcass
Inspection--
Complete Carcass
Inspection**

Hindquarter and forequarter carcass inspections are performed at one time. It is used when there is a separate carcass inspection station on a continuously moving line. It is performed after the carcass is split in half, but before the carcass halves are washed by plant employees.

1. Palpate the scrotal (superficial inguinal) or mammary (supramammary) and medial (internal) iliac lymph nodes.
2. Observe lumbar region.
3. Observe and palpate the kidneys.
4. Observe diaphragm's pillars and peritoneum.
5. Observe and palpate diaphragm.
6. Observe the pleura, cut surfaces or muscles and bones, and carcass exterior.

Follow the diagrams to visualize the procedures used in inspection.

COMPLETE CARCASS INSPECTION ROUTINE DIAGRAM GOES HERE

**Cattle Carcass
Inspection--
Review**

Before trying cattle carcass inspection, learn the names and locations of the new lymph nodes mentioned.

These lymph nodes are:

1. *Scrotal* (superficial inguinal)
 2. *Mammary* (supramammary)
 3. *Medial* (internal) iliac lymph node.
- Located in the same area on each carcass.

The scrotal (superficial inguinal) lymph node is the name of the node in the male and the mammary (supramammary) lymph node is the name of the same node in the female).

The locations of these lymph nodes are easier to remember if you observe that the medial (internal) iliac lymph node is located inside the abdominal cavity. The other two, the scrotal (superficial inguinal) (superficial, on the surface, outside) and mammary (supramammary) (related to the mammary gland or udder on the outside) are located outside the body cavities.

The other structures named in the carcass procedures should already be familiar to you. If you are hesitant about the identification of a structure, check in the Inspection Anatomy Part and be sure to ask your trainer.

**Cattle
Postmortem
Inspection
Routines--
Summary**

1. There are specific inspection routines for cattle heads, cattle viscera, and cattle carcasses.
2. Each inspection routine consists of a series of steps in a specific order.
3. Regardless of which routine is used at a plant, *no structure requiring inspection is omitted.*
4. Postmortem inspection in cattle follows one of two patterns:
 - a. *Head → Hindquarter → Viscera → Forequarter*, or
 - b. *Head → Viscera → Complete Carcass*

SECTIONAL PROGRESS SHEET (Cattle Postmortem Inspection)

Dr. _____ completed this section that consisted of the following:

Reading the objectives for this section.

Reviewing the Cattle Postmortem Inspection information in this step of the EDG.

Completing the Cattle CBT module.

Discussing the completed modules with me.

Demonstrating his/her ability to perform the objectives including the passing of the exam.

Comments:

If the employee has not met all of the objectives, describe the objectives that were not met and explain why they were not met.

Explanation:

Signature (Trainer)

Date

SWINE POSTMORTEM INSPECTION (Examination required)

Instructions

Read the objectives for this section.

Read the Swine Postmortem Inspection information in this step of the EDG.

Complete the Swine Inspection CBT module.

Discuss the completed module with your trainer.

Demonstrate to your trainer your ability to perform the objectives including the passing of the exam.

Have your trainer sign the sectional progress sheet for this section.

Objectives

When you complete this section of training, you will be able to pass only those swine carcasses that yield meat or food products that are healthful, safe from harmful chemical and drug residue, and consistent with the consumer's sense of decency by:

- _____ Performing postmortem inspection on carcasses and parts, organs and body tissues for evidence of disease, parasitic infestations, biological residues, or other conditions that could render the carcass or parts unfit for human food.
- _____ Enforcing the requirement that the heads be dropped only on clean carcasses.
- _____ Performing swine head inspection procedures according to the MPI Regulations and the MPI Manual.
- _____ Using a knife and hook to locate and expose the mandibular lymph nodes.
- _____ Using a knife and hook to slice the lymph nodes thin enough to expose the entire body of the node.
- _____ Observing the cut surface of the sliced lymph nodes for evidence of unacceptable and/or pathological conditions.
- _____ Observing the exposed and cut surfaces of the head.
- _____ Detecting conditions of improper presentation while performing head inspection; such as head missing, mandibular lymph nodes left in neck, hair, scurf, toenails, hog rings, machine cuts, eyelids, eartags, overscalded condition, and surface contaminants (grease, dirt, ingesta, pus, rosin).
- _____ Detecting pathological conditions while performing head inspection; such as atrophic rhinitis, cysticercosis, anthrax, "diamond skin," icterus, arthritis, burns, frostbite, melanosis, icterus, arthritis, erysipelas, and septicemic skin lesions.

- _____ Performing swine viscera inspection procedures according to the MPI Regulations and the MPI Manual.
- _____ Detecting conditions of improper presentation while performing viscera inspection; such as surface contaminants, position of viscera, ingesta, hair, toenails, ties, bile stain, portions of viscera left in carcass.
- _____ Detecting pathological conditions while performing viscera inspection; such as arthritis, nephritis, abscesses, fractures, kidney worms, enteritis, peritonitis, scirrhus cord, neoplasms, pleuritis, pneumonia, and pus.
- _____ Performing swine carcass inspection procedures according to the MPI Regulations and the MPI Manual.
- _____ Observing all surfaces of the carcass for evidence of unacceptable conditions, diseased conditions, and/or improper presentation.
- _____ Detecting conditions of improper presentation while performing swine carcass inspection; such as hair, scurf, machine cuts, toenails, spermatic cord remnants, stick would not opened, kidneys not exposed, overscald, ingesta, oil, and grease.
- _____ Detecting pathological conditions while performing swine carcass inspection, such as arthritis, abscesses, diamond skin, dermatitis, nephritis, bruises, cysticercosis, cystic kidneys, tuberculosis, kidney worms, pus, wounds, frostbite, and burns.
- _____ Detecting unacceptable conditions such as sexual odor or injection sites.
- _____ Differentiating unacceptable conditions, pathological conditions, and/or improper presentations that can be remove don the line from unacceptable conditions, pathological conditions, and/or improper presentations that should be retained.
- _____ Directing the removal of certain unacceptable conditions, certain diseased conditions, and/or certain improper presentations.
- _____ Retaining the head and/or the viscera and/or the carcass for certain unacceptable conditions, certain pathological conditions, and/or certain improper presentations.
- _____ Removing the retain tag from properly trimmed carcasses retained because of localized conditions, provided inspection does not reveal extension of the condition.

SWINE POSTMORTEM INSPECTION

Sequence Of Inspection

The postmortem inspection of swine is divided into three parts:

Head inspection

Viscera (internal organs) inspection

Carcass inspection

On each part, specific tissues of the animal are required to be examined in a specific sequence (order). There are minor variations in the sequence of the inspection from plant to plant, but *no part required to be inspected may be missed*. Minor variations in the details of the inspection sequence are necessary because of the differences in packing plant designs and types of equipment. Also, *the inspection of additional parts may be necessary*.

The sequence of inspection of the various required parts depends greatly on their *method of presentation for inspection*. In smaller plants, for example, one inspector may examine the head, internal organs, and carcass of each hog slaughtered. In these plants, all the parts are usually presented for inspection in one location so the inspector can check all the required parts quickly without having to walk very far. In larger plants there may be one or more inspectors examining each of three parts (head, viscera, and carcass). To give the inspectors enough working room, the “inspection stations” (inspectors’ work areas) are separated from each other.

Uniformity Of Presentation

Regardless of the method of presentation for inspection of the parts, the presentation is consistent from animal to animal. In other words, each part to be inspected (each head, each set of viscera, or each carcass) is placed in the same position before being brought to the inspector for examination. This permits the inspector to perform the inspection routine on each part in the same sequence each time, thus increasing the speed of the procedure while reducing the chances that the inspection of some required tissue will be overlooked.

Sanitation

In addition to uniform presentation for inspection, the cleanliness of the dressing operation is a factor influencing the inspection routine. Tissues and organs contaminated with intestinal contents and other contaminants must not be left uninspected just because they are contaminated. If they were left uninspected, a condition that might have a bearing on the fitness of the whole carcass for human food might go undetected, being hidden by the contaminating material. After inspecting contaminated parts, the inspectors must thoroughly clean and sanitize their hands and their equipment before examining the next part. Otherwise, the contaminants and organisms that might have the potential for causing human diseases would be transferred from part to part as the slaughter progressed. Thorough cleaning and sanitizing takes time, so it is to the advantage of the plant to present all parts for inspection uniformly and as free of contamination as possible.

**Swine Head
Inspection--
Introduction**

Head inspection is performed first. Regardless of the method of presentation of the heads for inspection, certain specific tissues are always examined. These tissues are usually examined in a specific order; although, as mentioned earlier, minor variations may be necessary due to the unique circumstances at this plant. Before trying the swine head inspection routine, learn the following steps in the following sequence. They will give you an idea of what to expect when you first “try the line” with your trainer. Be sure to learn the new anatomical terms so you can better understand your trainer’s descriptions of procedures, tissues, and findings.

**Swine Head
Inspection--
Methods**

The swine heads may be left attached to the carcasses or placed in a pan next to the viscera.

SWINE HEAD PLACEMENT DIAGRAM GOES HERE

Observe the head and cut surfaces—the eyes, fat, cheek muscles, and other tissues must be observed for abnormalities.

Incise and observe the right and left mandibular lymph nodes—the mandibular lymph nodes are located by the cheek muscles, as in cattle. Occasionally a lymph node may be left in the neck and not on the head. The sequence in which they are incised and in which the tissues are observed depends on the direction of the flow of the head. The closest tissues are usually examined first. The lymph nodes are incised with the wrist-rolling motion described in Methods of Postmortem Inspection (B.8).

Observe/retain carcasses when required—if the head or carcass contains abnormal changes, then the carcass and parts are tagged with retain tags by the inspector to indicate that they are to be railed out to the carcass disposition area for examination by the veterinarian.

Remember:

- No step may be omitted (and additional steps may be added as necessary).
- The routine is the fastest, safest, most sanitary way to make all required examinations without missing anything.
- Your trainer will demonstrate the routine used at this plant.
- If a head falls on the floor, it must be inspected.

LOCATION OF MANDIBULAR LYMPH NODES DIAGRAM GOES HERE

**Swine Viscera
Inspection--
Introduction**

The viscera are usually presented in pans on a moving top table. The carcass is nearby, often directly behind the inspector examining the viscera from it. The inspectors must know at all times which parts belong to a carcass. Conditions requiring the attention of the veterinarian may be detected at any time; and when they are, *all* parts of the carcass must be retained and removed to the carcass disposition area for the veterinarian to examine. Inspectors tell which set of viscera belongs to which carcass by their relative positions; usually the carcass is directly opposite its viscera.

If the head is presented on the moving table with the viscera, it is placed in a specific location relative to the viscera also, usually in a holder in the pan in front of the viscera.

VISCERA-BODY PLACEMENT DIAGRAM GOES HERE

You can check which viscera belong to which carcass any time by counting sets from the point at which the carcasses are eviscerated to the viscera inspection point. Be suspicious if you see an empty viscera pan but no gap in the line of carcasses!

The new words used in describing the swine viscera inspection routine are:

Mesenteric lymph nodes

Hepatic lymph nodes

Tracheobronchial lymph nodes

The locations of these structures are indicated on the following copy of the swine viscera diagram from Inspection Anatomy (B.6.1).

LOCATIONS OF VISCERAL LYMPH NODES DIAGRAM GOES HERE

**Swine Viscera
Inspection--
Procedure**

As the sets of viscera approach you:

Observe the carcass. Check for retain tags. Their presence and position on a carcass (or other part) have definite meanings to the inspectors. Then look inside the carcass for any obvious disease conditions. When such conditions are found, the inspector immediately retains the carcass and all parts (the head and all the viscera) for removal to the veterinary disposition area.

Inspect the viscera. The usual sequence (subject to the variations indicated by your trainer) is as follows:

1. Observe eviscerated carcass, viscera, and parietal (top) surface of spleen.
2. Observe and palpate mesenteric lymph nodes.
3. Palpate portal lymph nodes.
4. Observe dorsal (curved) surface of lungs.
5. Palpate tracheobronchial (bronchial) lymph nodes—right and left.
6. Observe mediastinal lymph nodes.
7. Turn lungs over and observe ventral (flat) surfaces.
8. Observe heart.
9. Observe dorsal (curved) surfaces of liver.
10. Turn liver over and observe ventral (flat) surface.
11. Condemn viscera or parts when required.
12. Retain carcass, viscera, and parts when required.

The next diagram indicates the sequence of the swine viscera inspection routine.

SWINE VISCERA INSPECTION ROUTINE DIAGRAM GOES HERE

Remember:

- No step may be omitted (and additional steps may be added as necessary).
- The routine is the fastest, safest, most sanitary way to make all the required examinations without overlooking anything.
- Your trainer will demonstrate the routine used at this plant.

**Swine Carcass
Inspection--
Introduction**

Before the carcass is examined, the kidneys are “popped” (removed from their capsules) by a plant employee. Numerous other plant dressing operations may be performed on the carcass before the carcass inspector sees it. What is done here will be explained by your trainer.

**Swine Carcass
Inspection--
Procedure**

As the carcass approaches you, look in the mirror and observe the back of the carcass (in plants where a mirror is not required, turn and observe the back of the carcass).

Observe the front parts and inside of the carcass:

1. Observe all cut surfaces.
2. Observe all body cavities (pelvic, abdominal, and thoracic).
3. Observe the lumbar region.
4. Observe the neck region.

Grasp, turn, and observe both sides of the kidneys.

Direct the trimming of the carcass, remove retain tags from the carcass, or retain the carcass when required.

CARCASS INSPECTION PROCEDURE DIAGRAM GOES HERE

SECTIONAL PROGRESS SHEET (Swine Postmortem Inspection)

Dr. _____ completed this section
that consisted of the following:

Reading the objectives for this section.

Reading the Swine Postmortem Inspection information in this step of the EDG.

Completing the Swine Inspection CBT module.

Discussing the completed module with me.

Demonstrating his/her ability to perform the objectives including the passing of the exam.

Comments:

If the employee has not met all of the objectives, describe the objectives that were not met and explain why they were not met.

Explanation:

Signature (Trainer)

Date

SHEEP AND GOAT POSTMORTEM INSPECTION (No examination required)

Instructions

Read the objectives for this section.

Complete the Sheep and Goat Postmortem Inspection CBT module.

Discuss the completed module with your trainer.

Demonstrate to your trainer your ability to perform the objectives in this section.

Have your trainer sign the sectional progress sheet for this section.

Objectives

When you complete this section of training, you will be able to pass only those sheep carcasses that yield meat or food products that are healthful, safe from harmful chemical and drug residues, and consistent with the consumer's sense of decency by:

- _____ Performing postmortem inspection on carcasses and parts, organs and body tissues for evidence of disease, parasitic infestations, biological residues, or other conditions that could render the carcasses or parts unfit for human food.
- _____ Performing sheep inspection procedures according to the MPI Regulations and the MPI Manual.
- _____ Detecting unacceptable conditions, pathological conditions, and/or improper presentations.
- _____ Differentiating unacceptable conditions, pathological conditions, and/or improper presentations that can be removed on the line from unacceptable conditions, pathological conditions, and/or improper presentations that should be retained.
- _____ Directing the removal of certain unacceptable conditions, certain diseased conditions, and/or certain improper presentations.
- _____ Retaining the head and/or the viscera and/or the carcass for certain unacceptable conditions, certain pathological conditions, and/or certain improper presentations.
- _____ Removing the retain tag from properly trimmed carcasses retained because of localized conditions, provided inspection does not reveal extension of the condition.

SECTIONAL PROGRESS SHEET (Sheep and Goat Postmortem Inspection)

Dr. _____ completed this section that consisted of the following:

Reading the objectives for this section.

Completing the Sheep and Goat Postmortem Inspection module.

Discussing the completed module with me.

Demonstrating his/her ability to perform the objectives in this section.

Comments:

If the employee has not met all of the objectives, describe the objectives that were not met and explain why they were not met.

Explanation:

Signature (Trainer)

Date

CALF POSTMORTEM INSPECTION (No examination required)

Instructions

Read the objectives for this section.

Complete the Calf Inspection CBT module.

Discuss the completed module with your trainer.

Demonstrate to your trainer your ability to perform the objectives in this section.

Have your trainer sign the sectional progress sheet for this section.

Objectives

When you complete this section of training, you will be able to pass only those calf carcasses that yield meat or food products that are healthful, safe from harmful chemical and drug residues, and consistent with the consumer's sense of decency by:

- _____ Performing postmortem inspection on carcasses and parts, organs, and body tissues for evidence of disease, parasitic infestations, biological residues, or other conditions that could render the carcasses or parts unfit for human food.
- _____ Performing calf inspection procedures according to the MPI Regulations and the MPI Manual.
- _____ Detecting unacceptable conditions, pathological conditions, and/or improper presentations.
- _____ Differentiating unacceptable conditions, pathological conditions, and/or improper presentations that can be removed on the line from unacceptable conditions, pathological conditions, and/or improper presentations that should be retained.
- _____ Directing the removal of certain unacceptable conditions, certain diseased conditions, and/or certain improper presentations.
- _____ Retaining the head and/or the viscera and/or the carcass for certain unacceptable conditions, certain pathological conditions, and/or certain improper presentations.
- _____ Removing the retain tag from properly trimmed carcasses retained because of localized conditions, provided inspection does not reveal extension of the condition.

SECTIONAL PROGRESS SHEET (Calf Postmortem Inspection)

Dr. _____ completed this section
that consisted of the following:

Reading the objectives for this section.

Completing the Calf Inspection CBT module.

Discussing the completed module with me.

Demonstrating his/her ability to perform the objectives in this section.

Comments:

If the employee has not met all of the objectives, describe the objectives that were not met and explain why they were not met.

Explanation:

Signature (Trainer)

Date

EQUINE INSPECTION (No examination required)

Instructions

Read the objectives for this section.

Complete the Equine Inspection CBT module.

Discuss the completed module with your trainer.

Demonstrate to your trainer your ability to perform the objectives in this section.

Have your trainer sign the sectional progress sheet for this section.

Objectives

When you complete this section of training, you will be able to pass only those equine carcasses that yield meat or food products that are healthful, safe from harmful chemical and drug residues, and consistent with the consumer's sense of decency by:

- _____ Performing postmortem inspection on carcasses and parts, organs and body tissues for evidence of disease, parasitic infestations, biological residues, or other conditions that could render the carcasses or parts unfit for human food.
- _____ Performing equine inspection procedures according to the MPI Regulations and the MPI Manual.
- _____ Detecting unacceptable conditions, pathological conditions, and/or improper presentations.
- _____ Differentiating unacceptable conditions, pathological conditions, and/or improper presentations that can be removed on the line from unacceptable conditions, pathological conditions, and/or improper presentations that should be retained..
- _____ Directing removal of certain unacceptable conditions, certain diseased conditions, and/or certain improper presentations.
- _____ Retaining the head and/or the viscera and/or the carcass for certain unacceptable conditions, certain pathological conditions, and/or certain improper presentations.
- _____ Removing the retain tag from properly trimmed carcasses retained because of localized conditions, provided inspection does not reveal extension of the condition.

SECTIONAL PROGRESS SHEET (Equine Inspection)

Dr. _____ completed this section that consisted of the following:

Reading the objectives for this section.

Completing the Equine Inspection CBT module.

Discussing the completed modules with me.

Demonstrating his/her ability to perform the objectives in this section.

Comments:

If the employee has not met all of the objectives, describe the objectives that were not met and explain why they were not met.

Explanation:

Signature (Trainer)

Date

VETERINARY LIVESTOCK DISPOSITIONS SECTION (Examination required)

Instructions

Read the objectives for this section.

View the Veterinary Disposition Outline and Prerequisite CBT modules (Pathology, Food Animal Diseases, and Food Microbiology).

Read the Livestock Carcass Disposition Review booklet.

Demonstrate to your trainer your ability to perform the objectives including the passing of the exam.

Prepare three different veterinary livestock disposition case studies. Each case should consist of a narrative that describes your antemortem and postmortem findings, laboratory results (lab samples must be submitted for at least one of the cases), and your disposition.

Mail your three different veterinary livestock disposition case studies to:

904 Red Meat Staff Officer
USDA/FSIS/FO/HRDS
Crystal Park Plaza Suite 3000
2700 East Bypass
College Station, TX 77845-5009

Have your trainer sign the sectional progress sheet for this section.

Objectives

When you complete this section of your training, you will be able to:

- _____ Systematically examine the animal and/or a carcass.
- _____ Detect abnormalities and pathological conditions in an animal and/or a carcass.
- _____ Recognize signs of reportable diseases.
- _____ Recognize injection sites and other signs of possible residues.
- _____ Recognize the degenerative changes in tissues and organs that are associated with generalized disease processes.
- _____ Differentiate between a localized disease condition and a generalized disease condition.
- _____ Differentiate between an acute disease condition and a chronic disease condition.
- _____ Recognize signs indicating that a disease process has altered the normal characteristics of meat to cause it to be unacceptable for human food.

- _____ Differentiate normal physiological changes from pathological changes.
- _____ Differentiate normal color variations in carcasses due to breed, age, ration, etc., from carcass color changes due to disease.
- _____ Determine the stage of development of a disease process.
- _____ Correlate antemortem findings, postmortem findings, and laboratory results (if available) to establish an accurate diagnosis.
- _____ Evaluate abnormalities and pathological conditions to determine if the meat is unacceptable for human food.
- _____ Make dispositions based on professional judgement and published guidelines.
- _____ Require proper handling of retained and condemned animals.

SECTIONAL PROGRESS SHEET (Veterinary Livestock Dispositions)

Dr. _____ completed this section that consisted of the following:

Reading the objectives for this section.

Viewing the Veterinary Disposition Outline and Prerequisite CBT modules.

Reading the Livestock Carcass Disposition Review booklet.

Demonstrating his/her ability to perform the objectives including the passing of the exam.

Preparing three different veterinary livestock disposition case studies.

Mailing three different veterinary livestock disposition case studies to the Program Training Division.

Comments:

If the employee has not met all of the objectives, describe the objectives that were not met and explain why they were not met.

Explanation:

Signature (Trainer)

Date

VISCERA SEPARATION (Examination required)

Instructions

Read the objectives for this section.

Complete the Viscera Separation CBT module.

Discuss the completed module with your trainer.

Demonstrate your ability to perform the objectives including the passing of the exam.

Have your trainer sign the sectional progress sheet for this section.

Objectives

When you complete this section of training, you will be able to:

- _____ Monitor the viscera separation and offal preparation procedures.
- _____ Follow the flow of product through each viscera separation and offal preparation area.
- _____ Identify defects found in edible product.
- _____ Distinguish edible, inedible, and pharmaceutical products.
- _____ Enforce FSIS requirements for the following:
 - Pork tongue
 - Beef lips
 - Pork livers
 - Tripe
 - Weasand
 - Brains
 - Hearts
 - Chitterlings
 - Cheeks
 - Tongues
 - Snouts, ears, etc.
 - Product treated with proteolytic enzyme
 - Casings
 - Lungs
- _____ Complete and distribute FSIS Form 6750-1 and the FSIS form 7010-4.
- _____ Identify or differentiate the following:
 - Meat
 - Meat byproduct
 - Meat food product
 - Products
 - Edible product
 - Inedible product
 - Condemned product
 - Branding
 - Stenciling
 - Labeling
 - Nonmeat item approval
 - Back-siphonage
 - Community bath

SECTIONAL PROGRESS SHEET (Viscera Separation)

Dr. _____ completed this section that consisted of the following:

Reading the objectives for this section.

Completing the Viscera Separation CBT module.

Discussing the completed modules with me.

Demonstrating his/her ability to perform the objectives including the passing of the exam.

Comments:

If the employee has not met all of the objectives, describe the objectives that were not met and explain why they were not met.

Explanation:

Signature (Trainer)

Date

SECTIONAL PROGRESS SHEET (Control)

Dr. _____ completed this section that consisted of the following:

Reading the performance objectives for this section.

Completing the Control of Inedible and Condemned Meat Materials CBT module.

Completing the Control of Restricted Product CBT module.

Discussing the completed modules with me.

Demonstrating his/her ability to perform the performance objectives in this section including the passing of the exam.

Comments:

If the employee has not met all of the objectives, describe the objectives that were not met and explain why they were not met.

Explanation:

Signature (Trainer)

Date

CONTROL (Examination required)

Instructions

Read the objectives for this section.

Complete the Control of Inedible and Condemned Meat Materials CBT module.

Complete the Control of Restricted Product CBT module.

Discuss the completed modules with your trainer.

Demonstrate to your trainer your ability to perform the objectives including the passing of the exam.

Have your trainer sign the sectional progress sheet for this section.

Objectives

When you complete this section of training, you will be able to maintain control of all inedible and condemned products, direct their disposal in a way that conforms with the applicable regulations and prevent their entry into human food channels and the environment by:

- _____ Controlling the disposal of livestock that are found unacceptable for slaughter.
- _____ Controlling the disposal of meat product and meat food product that is found unacceptable for human consumption.
- _____ Monitoring the separation of edible product from condemned and/or inedible material.
- _____ Insuring that the methods used for disposal of condemned and/or inedible material actually change the appearance of character of the material so it can no longer be used as human food.
- _____ Requiring that all condemned products removed from the establishment without hashing or rendering be denatured with crude carbolic acid, cresylic disinfectant, or another prescribed agent.
- _____ Requiring condemned product to be under surveillance or seal until it is denatured.
- _____ Permitting only the following to be used as animal food: carcasses affected with anasarca, nonsystemic arthritis (after removal of joints), emaciation, eosinophilic myositis, immaturity, nonseptic bruises and injuries, sarcocystosis, embryos, and ocular squamous cell carcinoma (after removal of neoplastic tissue); and product that could be saved as edible human food.
- _____ Obtaining the permission to ship undenatured inedible and/or condemned material.

- _____ Requiring the submission of an FSIS Form 6700-2 before specimens of condemned or inedible material can be released from the plant for research or educational purposes.
- _____ Complete, secure, verify, and distribute condemned and/or inedible records (e.g., FSIS Form 6700-2, FSIS Form 7010-4, and FSIS Form 6750-1).
- _____ Enforce sanitation requirements in inedible and condemned material handling departments.
- _____ Determining the effectiveness of inedible and condemned material procedures and controls.

When you complete this section of training, you will be able to maintain control of all product passed with a restriction and prevent its entry into human food channels until the restrictions have been met by:

- _____ Identifying product that can only be passed with a restriction.
- _____ Monitoring the separation of edible product passed with a restriction from edible product passed without a restriction.
- _____ Insuring that the methods used for meeting the restriction are in compliance with MPI regulations.
- _____ Requiring the restricted product to be under surveillance or seal until the restrictions have been met.
- _____ Determining the effectiveness of the procedures used to meet the restrictions.
- _____ Completing, verifying, and distributing restricted product records such as the FSIS Form 6750-2 and the FSIS Form 7350-1.

SECTIONAL PROGRESS SHEET (Control)

Dr. _____ completed this section
that consisted of the following:

Reading the objectives for this section.

Completing the Control of Inedible and Condemned Meat Materials CBT module.

Completing the Control of Restricted Product CBT module.

Discussing the completed modules with me.

Demonstrating his/her ability to perform the objectives including the passing of the exam.

Comments:

If the employee has not met all of the objectives, describe the objectives that were not met and explain why they were not met.

Explanation:

Signature (Trainer)

Date

REINSPECTION (Open book examinations required)

Instructions

Read the objectives for this section.

Complete the Carcass Reinspection CBT module.

Complete the Boneless Meats Reinspection CBT module.

Discuss the completed modules with your trainer.

Demonstrate to your trainer your ability to perform the objectives including the passing of the exams. The exams for Boneless and AQL are OPEN BOOK exams.

Have your trainer sign the sectional progress sheet for this section.

Objectives

When you complete this section of training, you will be able to:

- _____ Select samples according to the methods and procedures in the MPI Manual.
- _____ Reinspect samples according to the methods and procedure sin the MPI Manual.
- _____ Identify and classify defects.
- _____ Determine whether product is to be accepted or rejected.
- _____ Perform a complete carcass reinspection.
- _____ Perform a complete boneless meat reinspection.
- _____ Prepare a concise, accurate, and complete reinspection report.

SECTIONAL PROGRESS SHEET (Reinspection)

Dr. _____ completed this section
that consisted of the following:

Reading the objectives for this section.

Completing the Carcass Reinspection CBT module.

Completing the Boneless meats Reinspection CBT module.

Discussing the completed modules with me.

Demonstrating his/her ability to perform the objectives including the passing of the exams. Note that both of these exams are "open book" in that references may be used.

Comments:

If the employee has not met all of the objectives, describe the objectives that were not met and explain why they were not met.

Explanation:

Signature (Trainer)

Date

FOOD PREPARATION, PRESERVATION, AND STORAGE SECTION

(Examination required only for Labeling and Marking)

Instructions

Read the objectives for this section.

Complete the Fabrication & Portion Control module.

Complete the Overview of Processed Foods module.

Complete the Rendering module.

Complete the Labeling & Marking CBT module.

Complete the Coolers, Shipping, and Receiving CBT module.

Complete the Export module.

Review the completed modules with your trainer.

Demonstrate to your trainer your ability to perform the objectives in this section including the passing of the Labeling and Marking exam.

Have your trainer sign the sectional progress sheet for this section.

Objectives

When you complete this section of your training, you will be able to:

- _____ Reinspect representative samples of all meat products presented for shipment to determine if they are properly labeled, marked, branded, or otherwise identified in conformance with requirements.
- _____ Work with plant management to maintain a control system related to manner, time, and place at which nonmeat ingredients and returned product will be presented for inspection.
- _____ Perform a net weight check.
- _____ Monitor and evaluate the plant's packaging procedures and practices.
- _____ Identify mislabeling; misbranding; official marks; official inspection legends; official devices; primal cuts of beef, veal, sheep, goats, and pork; shipping containers; and immediate containers.
- _____ Submit samples for laboratory analysis.
- _____ Secure marking devices in suitable facilities when not in use.
- _____ Maintain an inventory of all marking devices.

- _____ Supervise the defacing of unserviceable marking devices.
- _____ Distribute marking devices only as needed.
- _____ Supervise the legible marking of each primal cut from beef, veal, pork, sheep, and goat carcasses.
- _____ Identify each primal part from beef, veal, pork, sheep, and goat carcasses.
- _____ Supervise the proper marking of livers, hearts, and tongues.
- _____ Identify the number of marks of inspection to be applied to each carcass before entering the cooler and before leaving the establishment.
- _____ Require proper marking of carcass injected with proteolytic enzyme.
- _____ Identify the required markings of: shipping containers, immediate containers, protective covering, repacked foreign product, product derived from carcass treated with proteolytic enzyme, and product too small to be marked.
- _____ Detect unauthorized use of: noningredient labels, stencils, marks of inspection; and pencils, crayons, etc.
- _____ Identify the following types of label approvals: IIC, generic, SLD, temporary, and sketch.
- _____ Require the establishment to submit the following for approval: labels, marks, and other than official marks of inspection.

SECTIONAL PROGRESS SHEET (Food Preparation, Preservation, and Storage)

Dr. _____ completed this section
that consisted of the following:

Reading the objectives for this section.

Completing the Fabrication and Portion Control module.

Completing the Overview of Processed Foods module.

Completing the Rendering module.

Completing the Labeling and Marking CBT module (Exam required)

Completing the Coolers, Shipping, and Receiving CBT module.

Completing the Export module.

Reviewing the completed modules with me.

Demonstrating his/her ability to perform the objectives including the passing of the Labeling and Marking exam.

Comments:

If the employee has not met all of the objectives, describe the objectives that were not met and explain why they were not met.

Explanation:

Signature (Trainer)

Date

904 STEP C TRAINING REPORT

Trainee's Name: _____ Region: _____

Dates of Training: Start: _____ End: _____

Section	Subject	Module Supplement	Performance Objectives
C.3	FSIS Publications and Organizational Functions		
	Poultry and Red Meat Slaughter Overview		
C.4	Safety		
C.5	Sanitation		
C.6	Antemortem Inspection		
	Humane Slaughter		
C.7	Postmortem Inspection		
C.8	Cattle Postmortem Inspection		
C.9	Swine Postmortem Inspection		
C.10	Sheep and Goat Postmortem Inspection		
C.11	Calf Postmortem Inspection		
C.12	Equine Inspection		
C.13	Veterinary Livestock Dispositions (Part I)		
C.14	Viscera Separation		
C.15	Control of Inedible and Condemned Material		
	Control of Restricted Product		
C.16	Carcass Reinspection		
	Boneless Meat Reinspection		

Section	Subject	Module Supplement	Performance Objectives
C.17	Fabrication and Portion Control		
	Overview of Processed Foods		
	Edible Rendering and Refining		
	Labeling and Marking		
	Coolers, Shipping, and Receiving		
	Exports		

TRAINER: Date appropriate sections when trainee has successfully completed them. Explain any failure to satisfactorily complete a task on the bottom of this form. Sign form when STEP C training is completed.

Trainee's Signature _____ Date: _____
Trainer's Signature _____ Date: _____

(COLLECT THIS FORM AT THE FSIS TRAINING CENTER)

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VETERINARY INTERN PROGRAM

Meat and Poultry (904)

STEP A

District Office
Orientation
2 Days

STEP B

Designated Training Station
Plant Familiarization
Approximately 5 Days

STEP C

Designated Training Station
Technical OJT
Approximately 4 weeks

STEP D

Training Center Classroom
Supervision/Management,
Approximately 2 weeks

STEP E

Designated Training Station
OJT in IIC Responsibilities
Minimum of 2 weeks

STEP F

Designated Training station
Assessment Assignment
Trainee gets the opportunity to apply the new knowledge
and skills with limited supervision.
Minimum of 1 week

STEP G

Duty Station
Independent Assignment
Approximately 4 – 8 months

STEP H

Training Center
Seminar
(2) In-depth review of supervision/management responsibilities;
(2) in-depth review of IIC responsibilities; and (3) review of
carcass disposition.

904D- Classroom Portion

Prerequisites: Completion of 904 Step C modules.

This is a 9 day classroom portion that provides instruction on topics related to supervision and management.

904D Supervision and Management (Classroom Training)

Please bring: Employee Development Guide
Step C Training Report signed by your trainer

Class starting time: 8:00 a.m. on Tuesday of the first week.

Location: FSIS Training Center
200 Discovery Drive
College Station, TX 77845
(409) 260-9433 (commercial)

Class ending time: Course ends at 4:00 p.m. on last day.

TRAINING REPORT

904 STEP D (MEAT)

Dr. _____ has completed the 904 Veterinary Intern Program through Step D which ended _____.

SUPERVISION

- | | |
|---|--|
| 1. HACCP/ Pathogen Reduction/SPS | 9. Getting Your Ideas Across(ZM) |
| 2. Your Role and the Basic Principles(ZM) | 10. Health and Safety |
| 3. Giving Constructive Feedback(ZM) | 11. Performance Evaluation |
| 4. Labor Management Relations | 12. Inspector/Plant Management Relations |
| 5. Communications | 13. Managing Performance in HACCP |
| 6. EEO/Civil Rights | |
| 7. Interpersonal Relations | |
| 8. Integrity | |

Training Center Staff

Trainee

Date

VETERINARY INTERN PROGRAM

Meat and Poultry (904)

STEP A

District Office
Orientation
2 Days

STEP B

Designated Training Station
Plant Familiarization
Approximately 5 Days

STEP C

Designated Training Station
Technical OJT
Approximately 4 weeks

STEP D

Training Center Classroom
Supervision/Management,
Approximately 2 weeks

STEP E

Designated Training Station
OJT in IIC Responsibilities
Minimum of 2 weeks

STEP F

Designated Training station
Assessment Assignment
Trainee gets the opportunity to apply the new knowledge
and skills with limited supervision.
Minimum of 1 week

STEP G

Duty Station
Independent Assignment
Approximately 4 – 8 months

STEP H

Training Center
Seminar
(3) In-depth review of supervision/management responsibilities;
(2) in-depth review of IIC responsibilities; and (3) review of
carcass disposition.

TRAINING POLICIES & PROCEDURES FOR STEP E TRAINER

- Before the employee arrives at your plant, review Step E of the 904 Employee Development Guide (EDG).
- Review the Step D Training Report so that you can overcome any of the weaknesses and/or deficiencies identified by the Training Center.
- Help the employee meet the objectives in Step E.
- If the employee is having difficulty meeting a Step E objective, it may be necessary to review some of the objectives in Step C.
- Discuss the employee's training problems (e.g., incomplete modules, knowledge deficiencies, failure to develop skills) with the FSIS Training Center. You may call collect (409) 260-9433.
- Handle the employee's personnel problems (e.g., tardiness, AWOL, Leave, Travel, T&A) through normal supervisory channels.
- Complete the Step E Training Report at the end of this step. Draw a line through any areas that were not covered in this step.
- Verify the time and date the employee is to report for the Step F Assessment Assignment.

ON-THE-JOB TRAINING IIC RESPONSIBILITIES

Introduction

Step E is designed to give you the opportunity to apply the knowledge and skills you acquired in Step D and also to give you the chance to continue developing the skills started in Step C. While under the close guidance of a designated trainer, you will function as a IIC. Upon completion of the step, you should be able to meet all of the objectives listed in Step C and all objectives listed in Step E of the Employee Development Guide. The Step C and E objectives cover your IIC responsibilities in the following areas:

Health and Safety

Preoperational and Operational Sanitation

Antemortem Inspection and Humane Slaughter

Postmortem Inspection

Veterinary Livestock Dispositions

Septicemia-Toxemia

Granulomatous Group

Miscellaneous Group

Parasitic and Pigmentary Group

Neoplastic Group

Viscera Separation

Control of Inedible and Condemned Material and Control of Restricted Product

Carcass Reinspection

Boneless Meats Reinspection

Food Preparation, Preservation, and Storage

Fabrication and Portion Control

Edible Rendering and Refining

Labeling and Marking

Coolers, Shipping, and Receiving

Export

Submission of Laboratory Specimens

Tuberculin Reactor Procedure

Veterinary Slaughter Reports

Biological Residues

Veterinary Services

Supervision and Management

OBJECTIVES

Health and Safety

When you complete this step of your training, you should be able to fulfill your agency health and safety responsibilities by:

- _____ Supervising the completion of a subordinate's injury or occupational illness reports.
- _____ Supervising the completion of motor vehicle accident reports involving a federally owned, leased, or rented vehicle.
- _____ Reporting and correcting work hazards.
- _____ Posting the names and addresses of designated agency safety officials, the location of the first aid kit, and the names of employees responsible for applying first aid.
- _____ Maintaining first aid medical supplies.
- _____ Maintaining health and safety records.
- _____ Administering the agency employee alcoholism and drug abuse program.
- _____ Assuring that all subordinates follow safety and health rules.
- _____ Assuring that all subordinates use appropriate personal protective equipment.

Sanitation

When you complete this step of your training, you should be able to insure that a satisfactory standard of sanitation is maintained throughout the plant by:

- _____ Scheduling preoperational sanitation inspectors.
- _____ Performing and supervising preoperational sanitation inspection.
- _____ Performing and supervising preoperational sanitation inspection.
- _____ Communicating sanitation standards to inspectors and plant management.
- _____ Monitoring sanitation inspector's performance.

Antemortem Inspection and Humane Slaughter

When you complete this step of your training, you should be able to permit the slaughter of only those animals that yield meat or meat food products that are healthful, safe from harmful chemical and drug residues, and consistent with the consumer's sense of decency by:

- _____ Performing and supervising antemortem inspection and humane slaughter.

- _____ Determining the effect of observed abnormal conditions upon postmortem inspection accuracy/efficiency.
- _____ Regulating line speeds according to the effect of antemortem conditions.
- _____ Applying correct controls to animals that have been or are suspected to have been fed an experimental drug or chemical.
- _____ Notifying appropriate state and federal officials whenever animals are suspected of having reportable diseases.

**Postmortem
Inspection**

When you complete this step of your training, you should be able to pass only those carcasses that yield meat or meat food products that are healthful, safe from harmful chemical and drug residues, and consistent with the consumer's sense of decency by:

- _____ Performing and supervising postmortem inspection.
- _____ Determining the relationship of carcass preparation/presentation to postmortem inspection efficiency/accuracy.
- _____ Requiring line speeds to be reduced whenever carcass preparation/presentation has an adverse effect on postmortem inspection efficiency/accuracy.
- _____ Correlating postmortem actions of subordinate food inspectors.
- _____ Completing, submitting, and filing postmortem inspection reports.

**Veterinary
Livestock Disposition**

When you complete this step of your training, you should be able to:

- _____ Correlate antemortem and postmortem findings and available laboratory results to establish an accurate diagnosis.
- _____ Identify an animal or a carcass with a reportable disease.
- _____ Notify the appropriate state and/or federal officials when an animal or a carcass is suspected of having a reportable disease.
- _____ Determine the acceptability of an animal or a carcass for further processing as human food.
- _____ Prepare, distribute, file, and maintain antemortem and postmortem reports.

Viscera Separation

When you complete this step of your training, you should be able to:

- _____ Monitor and supervise the monitoring of viscera separation procedures.
- _____ Monitor and supervise the monitoring of offal preparation procedures.

**Control of Inedible
Material and
Condemned Product**

When you complete this step of your training, you should be able to:

- _____ Control and supervise the control of all inedible and condemned material and all product with a restriction.
- _____ Assure that inedible and condemned material is disposed in a manner that conforms with the applicable regulations.
- _____ Prevent the entry and supervise the prevention of the entry of condemned and inedible material into human food channels and into the environment.
- _____ Prevent the entry and supervise the prevention of the entry of restricted product into human food channels until the restrictions have been met.

Reinspection

When you complete this step of your training, you should be able to:

- _____ Perform and supervise the performance of carcass reinspection and boneless beef reinspection.

**Food Preparation,
Preservation, and
Storage**

When you complete this step of your training, you should be able to insure food safety by:

- _____ Monitoring and supervising the monitoring of processing operations.
- _____ Collecting, preparing and submitting processed product samples for laboratory analysis.
- _____ Supervising inspection programs designed to insure the use of acceptable food processing practices and acceptable food preservation methods.
- _____ Supervising inspection programs designed to insure the use of acceptable food storage and transportation methods.
- _____ Monitoring, analyzing, and evaluating the critical control points of a food process.
- _____ Evaluating the public health implications of a food process.
- _____ Insuring the safe packaging and packing of processed foods.
- _____ Evaluating the public health implications of food storage and transportation.
- _____ Monitoring and supervising the monitoring of labels within the official establishment.
- _____ Assisting plant management with label approvals.
- _____ Maintaining the shipment of approved labels between official establishments.

- _____ Regulating the shipment of approved labels between official establishments.
- _____ Determining if a label for an immediate container and/or a shipping container should be approved by the IIC or by the Standards and Labeling Division (SLD).
- _____ Approving labels that can be approved by the IIC.
- _____ Issuing and supervising the issuance of export certificates.
- _____ Determining the product requirements of an importing country.
- _____ Reviewing prepared export certificates for accuracy and completeness.

**Submission of
Laboratory
Specimens**

When you complete this step of your training, you should be able to:

- _____ Collect, prepare, and submit pathological samples.
- _____ Collect, prepare, and submit microbiological samples.
- _____ Collect, prepare, and submit monitoring phase residue samples.
- _____ Collect, prepare, and submit surveillance phase residue samples.
- _____ Maintain the official records of sampling activity.

**TB Reactor
Procedure**

When you complete this step of your training, you should be able to:

- _____ Perform a TB reactor postmortem inspection procedure on a carcass as outlined in MPI Guideline #4.
- _____ Collect and prepare a TB sample and submit it to the appropriate laboratory.
- _____ Correlate the antemortem and postmortem findings of a TB reactor, a TB suspect, and a TB exposed animal to establish a diagnosis.
- _____ Determine the acceptability of a TB reactor, a TB suspect, and a TB exposed animal for further processing into human food.

**Veterinary
Slaughter Reports**

When you complete this step of your training, you should be able to:

- _____ Write concise, accurate, and complete reports of antemortem and postmortem findings.
- _____ Prepare concise, accurate, and complete slaughter reports.
- _____ Distribute slaughter reports through the proper reporting channels.
- _____ File slaughter reports in the official government files.
- _____ Maintain slaughter report files.

Biological Residues

When you complete this step of your training, you should be able to:

- _____ Identify carcasses with injection sites.
- _____ Identify animals with signs and lesions associated with acute and chronic exposure to naturally occurring toxicants, drugs, pesticides, feed additives, and environmental contaminants.
- _____ Identify carcasses with gross lesions associated with acute and chronic exposure to residue-producing compounds.
- _____ Identify sources of possible food adulterants.
- _____ Collect case histories related to possible residue violations.
- _____ Determine if research animals are acceptable for human food.
- _____ Collect, prepare, and submit appropriate tissue samples for laboratory residue analysis.
- _____ Perform and interpret the results of appropriate implant residue test.
- _____ Make dispositions of residue violation animals or carcasses based on professional judgement, guidelines, and laboratory results.

Veterinary Services

When you complete this step of your training, you should be able to:

- _____ Identify an animal or a carcass with a reportable disease.
- _____ Notify the appropriate state and/or federal officials when an animal or a carcass is suspected of having a reportable disease.

Supervision and Management

When you complete this step of your training, you should be able to perform and supervise the performances of required administrative tasks, including:

Preparation and submission of Time and Attendance Reports Ad-321-3.

- _____ Maintain file for active T&A reports.
- _____ Require daily time posting on T&A's.
- _____ Review completed T&A's at end of pay period.
- _____ Verify, approve, and initial completed T&A reports.
- _____ Separate and distribute completed reports, including mailing correct copies to appropriate reporting office.

Preparation and submission of Services Rendered, FSIS Form 5100-1.

- _____ Maintain file of active FSIS forms 5100-1.
- _____ Verify and approve completed FSIS Forms 5100-1 at end of reporting period.
- _____ Distribute completed FSIS Forms 5100-1 according to instructions on bottom of each sheet.

Preparation and utilization of assignment rosters.

- _____ Make assignments.
 - Regular duty.
 - Early duty.
 - Late duty.
- _____ Know rotation periods.
 - In-plant.
 - Circuit.
- _____ Schedule leave.
 - Annual.
 - Sick.
 - Military.
- _____ Provide relief replacement.
 - Full-time inspector.
 - WAE inspector.
- _____ Know availability of relief inspectors.
 - Immediate plant area.
 - Circuit.
 - Area.
- _____ Obtain necessary approvals.
 - Circuit supervisor.
 - Area supervisor.

Preparation and submission of supplies requisitions.

- _____ Prepare requisition on schedule.
- _____ Inventory supplies.
- _____ Estimate needs.
 - Expendable property.
 - Nonexpendable property.
 - Accountable property.
 - Nonaccountable property.

Maintain adequate security.

- _____ Label files.
- _____ Accountable property.

Maintain current official references.

- _____ Regulations.
- _____ Manual.
- _____ FSIS.
 - Directives.
 - Notices.
 - Regional office issuances.

Conduct performance evaluation of subordinates.

Select performance elements for appraisal with participation of subordinate.

- _____ Review position description.
- _____ Identify performance elements.
- _____ Identify critical performance element(s).

Establish performance standards for each performance element and communicate them to subordinate.

- _____ Complete Performance Appraisal Worksheet for each performance element.
- _____ Review Performance Appraisal Worksheets with subordinate.
- _____ Forward Performance Appraisal Worksheets to reviewing official.

Monitor performance of subordinates using Principles of SPS.

- _____ Observe subordinate performance.
- _____ Compare subordinate performance to written performance standards.
- _____ If performance does not meet standard, determine the cause of the performance deficiency.
 - Deficiency cause by deficiency of execution (D_E).
 - Determine reason for (D_E).
 - Make appropriate corrections using SPS.
 - Deficiency caused by deficiency of knowledge (D_K)—provide appropriate training.
- _____ Document observations for use during performance evaluation.
- _____ Provide appropriate feedback to subordinate concerning performance.

Conduct periodic reviews of performance elements with subordinate.

- _____ Discuss subordinates' progress relative to the performance standards.
- _____ Document reviews on performance appraisal worksheets.

Complete annual performance rating.

- _____ Review subordinates record of accomplishments during appraisal period.
- _____ Complete performance appraisal worksheets.
- _____ Compare subordinate record to performance standards.
- _____ Complete FSIS Form 4430-7, Performance Appraisal.
- _____ Forward FSIS Form 4430-7 to reviewing official.

Conduct performance evaluation interview with subordinate.

- _____ Discuss performance rating with subordinate.
- _____ Review the subordinate's position description.
- _____ Answer any questions regarding Appendix I, USDA Employee Handbook.
- _____ Distribute FSIS Form 4430-7 per instructions.
- _____ Discuss the subordinate's concerns.
- _____ Discuss the subordinate's future performance goals.

- _____ Discuss the subordinate's development goals.
- _____ Conduct interim appraisals of subordinates as necessary.

Conduct Career Counseling with subordinates.

- _____ Develop an annual Career Development Plan with the concurrence of subordinate.
- _____ Conduct a career counseling discussion.
 - Determine skill, knowledge, and ability needs of subordinate
 - Discuss organization needs.
 - Discuss training needs.
- _____ Document plans.
 - Complete FSIS Form 4410-1—Career Development Plan.
 - Distribute to appropriate approving official.
 - Give subordinate copy of approved plan.
 - Maintain a copy of approved plan.

Grant or withhold Within Grade Increases for subordinates.

- _____ Determine if the most recent performance appraisal supports the granting of a WGI.
- _____ Grant the WGI if the performance appraisal supports it.
 - Complete FSIS Form 4531.1.
 - Distribute FSIS Form 4531.1.
- _____ Withhold the WGI if the performance appraisal does not support the granting of a WGI.
 - Issue written notice to the subordinate.
 - Have notice approved by reviewing official.
 - Describe performance element(s) subordinate failed to perform at an acceptable level.
 - Refer to the standards for acceptable performance.
 - Include copies of Performance Appraisal Worksheets, FSIS Form 4351.1, FSIS Form 4430-7, and any other documentation pertinent to the determination.
 - Notify subordinate of right to request reconsideration.
 - Inform subordinate of the right to personal representation.
 - Inform the subordinate of the right to make a personal presentation.
 - Have written notice approved by reviewing official.

Conduct labor-management relations according to Agency policies.

- _____ Inform subordinates of their rights with regard to labor organization membership.
- _____ Read AFGE basic national agreement.
- _____ Read regional basic agreement.
- _____ Arrange for subordinates to contact their union representative during duty hours regarding conditions of employment.
- _____ Consult with appropriate union officials on matters of mutual interest.
- _____ Follow procedures specified in basic agreements.
- _____ Receive informal grievances from subordinates and attempt to resolve grievances informally.
- _____ Respond to written grievances in writing according to specified time frames.
- _____ Consult with circuit supervisor as necessary for grievance resolution.

Carry out the Agency EEO program within the work unit.

- _____ Discuss with subordinates appropriate official references to ensure that employees understand:
 - The EEO policy.
 - Discrimination complaint procedures.
- _____ Post EEO notices on official bulletin boards.
- _____ Assist EEO counselors in carrying out their activities.
 - Provide access to suitable space for counseling.
 - Provide access to telephone to permit counseling conversations in private.
 - Provide a secure place for counseling materials.
 - Forward mail to EEO counselors.
- _____ Provide equal opportunity for all employees or applicants.
- _____ Contribute to the development of the affirmative action plan.
- _____ Enforce the Agency policy regarding sexual harassment.

Fulfill merit promotion responsibilities.

- _____ Upon request, counsel subordinates on ways to improve chances of promotion.
- _____ Upon request, assist subordinates in completing their applications for promotion.
- _____ Insure that all subordinates, including those on leave or detail are aware of announced vacancies.
- _____ Upon request, complete FSIS Form 4335-1, Supervisor's Appraisal of applicant's possession of knowledge, skills, and abilities required for the job and forward to Promotion File Office.

Conduct new employee orientation.

- _____ Follow procedures in FSIS Directive 4200.2.
- _____ Provide the employee with a copy of the Employee Orientation Handbook.
- _____ Answer any new employee questions regarding benefits, employment policy, employee responsibilities, etc., or refer him/her to appropriate information source.

Establish and maintain effective communications with plant management.

- _____ Explain Agency policies, procedures, and regulations.
- _____ Notify plant management of any changes in Agency policies, etc.
- _____ Discuss the impact of changes on plant/inspection operations.
- _____ Attempt resolution of conflicts between inspection and plant management using consistent, concise, firm, reasonable, and courteous methods.
- _____ Listen to plant management views and develop a common interpretation of Industry/Agency goals.

Conduct work unit meetings with subordinate inspectors.

- _____ Schedule work unit meetings and provide adequate notice to subordinates.
- _____ Maintain brief record of meeting proceedings.

Conduct team problem-solving meeting.

_____ Set a positive, constructive atmosphere for problem-solving.

_____ Employee strategies of facilitation and brainstorming properly.

_____ Guide the team to meet objectives.

Define the problem(s).

Identify the cause(s).

Develop solution(s)—corrective(s).

Prepare a plan of action.

TRAINING REPORT 904 STEP E

Trainee's Name: _____

Objective	Date/Trainer Initials	Comments (Trainer/Trainee)
Health and Safety		
Preoperational Sanitation		
Operational Sanitation		
Antemortem Inspection		
Humane Slaughter		
Postmortem Inspection		
Veterinary Livestock Dispositions		
Viscera Separation		
Inedible and Condemned Material		
Restricted Product		
Carcass Reinspection		
Boneless Meat Reinspection		
Fabrication and Portion Control		
Edible Rendering and Refining		
Labeling and Marking		
Coolers, Shipping, and Receiving		
Exports		
Submission of Laboratory Specimens		
Tuberculin Reactor Procedure		
Veterinary Slaughter Reports		
Biological Residues		
Veterinary Services		

Objective	Date/Trainer Initials	Comments (Trainer/Trainee)
Supervision and Management:		
EEO		
Labor Management Relations		
Performance Evaluation		
Career Counseling		
Merit Promotion		
New Employee Orientation		
Work Unit Meetings		
Administration		
Plant Management Communication		
Team Problem Solving		

****Trainer Note:** Write “N/A” after any objective that addresses an operation not conducted at the Step E Training Location.

Trainer's Signature: _____ Date: _____

Trainee's Signature: _____ Date: _____

(THIS FORM STAYS IN THE EDG.)
THE BOTTOM OF THIS PAGE IS RESERVED FOR COMMENTS

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VETERINARY INTERN PROGRAM

Meat and Poultry (904)

STEP A

District Office
Orientation
2 Days

STEP B

Designated Training Station
Plant Familiarization
Approximately 5 Days

STEP C

Designated Training Station
Technical OJT
Approximately 4 weeks

STEP D

Training Center Classroom
Supervision/Management,
Approximately 2 weeks

STEP E

Designated Training Station
OJT in IIC Responsibilities
Minimum of 2 weeks

STEP F

Designated Training station
Assessment Assignment
Trainee gets the opportunity to apply the new knowledge
and skills with limited supervision.
Minimum of 1 week

STEP G

Duty Station
Independent Assignment
Approximately 4 – 8 months

STEP H

Training Center
Seminar
(4) In-depth review of supervision/management responsibilities;
(2) in-depth review of IIC responsibilities; and (3) review of
carcass disposition.

TRAINING POLICIES & PROCEDURES FOR STEP F TRAINER

- Before the employee arrives at your plant, review Step F of the 904 Employee Development Guide (EDG).
- Review the Assignment Profile (see page A.3.1 in the employee's copy of the EDG).
- Review the Step E Training Report in the employee's EDG.
- Review the objectives in Step C and in Step E of the EDG.
- Identify the objectives in Step C and E that will apply at the employee's duty station.
- Compare the employee's progress with the objectives that will apply at the employee's duty station.
- Provide coaching to the employee who is not meeting the objectives. Use the book, *The Supervisor and On-the-job Training*, by Broadwell as a reference.
- Discuss the employee's training problems with the FSIS Training Center as soon as possible. You may call collect (409) 260-9433.
- Handle personnel problems (tardiness, AWOL, etc.) through normal supervisory channels.
- When the employee has developed his/her technical and supervisory skills to the level that you judge necessary for the employee to assume the full responsibilities of his/her duty station, complete the Step F Training Report at the end of the step.
- If you assess the employee's development as MA or UN (see the Step F Training Report for a description of the assessment codes) for a responsibility that applies at the employee's duty station, then notify the FSIS Training Center as soon as possible. You may call collect (409) 260-9433. Also write your comments and/or recommendations in the space provided on the Step F Training Report.
- Send one copy of the completed Step F Training Report to the employee's District training officer and send one copy to the FSIS Training Center.
- Verify the time and date the employee is to report for the Step G Independent Assignment.

ASSESSMENT ASSIGNMENT

Introduction

Step F is designed to give you the opportunity to function as an IIC while under only limited guidance from your trainer. In this step you will receive less guidance and coaching from your trainer than you received in Step E. Your trainer will, however, be available to assist you whenever necessary. Your trainer will also use this step to assess your ability to perform under limited guidance and to determine if you are ready to assume the full responsibilities of your duty assignment. Your trainer will assess your progress by comparing it to the objectives found in Steps C and E.

TRAINING REPORT

904 STEP F (MEAT)

Assessment of Dr. _____

Employee's District _____

Assessment Code:

AC = Employee is ready to assume full responsibility for this area.

MA = Employee is almost ready to assume full responsibility*

UN = Development is unacceptable for full responsibility of area*

NA = Not applicable

INSERT CARBONS BEFORE COMPLETION

AREA OF RESPONSIBILITY	STEP F TRAINER'S ASSESSMENT	COMMENTS
Blueprints and Facilities		
Health and Safety		
Preoperational and Operational Sanitation		
Antemortem Inspection and Humane Slaughter		
Postmortem Inspection (Indicate applicable species with a check)		
<input type="checkbox"/> Cattle <input type="checkbox"/> Swine <input type="checkbox"/> Calves <input type="checkbox"/> Sheep <input type="checkbox"/> Equine <input type="checkbox"/> Goats		
Veterinary Livestock Dispositions		
Viscera Separation		
Control of Inedible and Condemned Material		
Control of Restricted Product		
Carcass Reinspection		
Boneless Meats Reinspection		
Food Preparation, Preservation, and Storage (Indicate applicable areas with a check)		
<input type="checkbox"/> Fabrication & Portion Control <input type="checkbox"/> Edible Rendering & Refining <input type="checkbox"/> Labeling & Marking <input type="checkbox"/> Coolers, Shipping, & Receiving <input type="checkbox"/> Export		
Submission of Laboratory Specimens		
Tuberculin Reactor Procedure		

(Please send this copy to the employee's district training officer.)

* Discuss with the FSIS Training Center as soon as possible.

TRAINING REPORT

904 STEP F (MEAT)

Assessment of Dr. _____

Employee's District _____

Assessment Code:

AC = Employee is ready to assume full responsibility for this area.

MA = Employee is almost ready to assume full responsibility*

UN = Development is unacceptable for full responsibility of area*

NA = Not applicable

INSERT CARBONS BEFORE COMPLETION

AREA OF RESPONSIBILITY	STEP F TRAINER'S ASSESSMENT	COMMENTS
Blueprints and Facilities		
Health and Safety		
Preoperational and Operational Sanitation		
Antemortem Inspection and Humane Slaughter		
Postmortem Inspection (Indicate applicable species with a check)		
<input type="checkbox"/> Cattle <input type="checkbox"/> Swine <input type="checkbox"/> Calves <input type="checkbox"/> Sheep <input type="checkbox"/> Equine <input type="checkbox"/> Goats		
Veterinary Livestock Dispositions		
Viscera Separation		
Control of Inedible and Condemned Material		
Control of Restricted Product		
Carcass Reinspection		
Boneless Meats Reinspection		
Food Preparation, Preservation, and Storage (Indicate applicable areas with a check)		
<input type="checkbox"/> Fabrication & Portion Control <input type="checkbox"/> Edible Rendering & Refining <input type="checkbox"/> Labeling & Marking <input type="checkbox"/> Coolers, Shipping, & Receiving <input type="checkbox"/> Export		
Submission of Laboratory Specimens		
Tuberculin Reactor Procedure		

(Please send this copy to the FSIS Training Center, 200 Discovery Drive, College Station, TX 77845.)

* Discuss with the FSIS Training Center as soon as possible.

TRAINING REPORT

904 STEP F (MEAT)

Assessment of Dr. _____

Employee's District _____

Assessment Code:

AC = Employee is ready to assume full responsibility for this area.

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INSERT CARBONS BEFORE COMPLETION

AREA OF RESPONSIBILITY	STEP F TRAINER'S ASSESSMENT	COMMENTS
Blueprints and Facilities		
Health and Safety		
Preoperational and Operational Sanitation		
Antemortem Inspection and Humane Slaughter		
Postmortem Inspection (Indicate applicable species with a check)		
<input type="checkbox"/> Cattle <input type="checkbox"/> Swine <input type="checkbox"/> Calves <input type="checkbox"/> Sheep <input type="checkbox"/> Equine <input type="checkbox"/> Goats		
Veterinary Livestock Dispositions		
Viscera Separation		
Control of Inedible and Condemned Material		
Control of Restricted Product		
Carcass Reinspection		
Boneless Meats Reinspection		
Food Preparation, Preservation, and Storage (Indicate applicable areas with a check)		
<input type="checkbox"/> Fabrication & Portion Control <input type="checkbox"/> Edible Rendering & Refining <input type="checkbox"/> Labeling & Marking <input type="checkbox"/> Coolers, Shipping, & Receiving <input type="checkbox"/> Export		
Submission of Laboratory Specimens		
Tuberculin Reactor Procedure		

(This form stays in the EDG.)

* Discuss with the FSIS Training Center as soon as possible.

INSERT CARBONS BEFORE COMPLETION

AREA OF RESPONSIBILITY	STEP F TRAINER'S ASSESSMENT	COMMENTS
Veterinary Slaughter Reports		
Biological Residues		
Veterinary Services		
Supervision and Management		

I have reviewed the Employee Development Guide for a thorough understanding of this employee's development program. I have assessed this employee's development by comparing his/her progress with the objectives found in Step C and in Step E. My overall assessment is that this employee (check the appropriate space)

_____ Is ready _____ Is almost ready* _____ Is not ready*

to assume the full responsibility of his/her duty assignment.

ADDITIONAL COMMENTS: _____

Processing training and poultry training were not included in this employee's development program. If the employee needs this training before h/she will be ready to assume the full responsibility of his/her duty assignment please check the appropriate space(s).

_____ Needs Processing Training _____ Needs Poultry Training

Trainee's Signature: _____ Date: _____

Trainer's Signature: _____ Date: _____

(Send this copy to the employee's district training officer.)

*Discuss with the FSIS Training Center as soon as possible.

INSERT CARBONS BEFORE COMPLETION

AREA OF RESPONSIBILITY	STEP F TRAINER'S ASSESSMENT	COMMENTS
Veterinary Slaughter Reports		
Biological Residues		
Veterinary Services		
Supervision and Management		

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_____ Needs Processing Training _____ Needs Poultry Training

Trainee's Signature: _____ Date: _____

Trainer's Signature: _____ Date: _____

(Please send this form to the FSIS Training Center, 200 Discovery Drive, College Station, TX 77845.)

*Discuss with the FSIS Training Center as soon as possible.

INSERT CARBONS BEFORE COMPLETION

AREA OF RESPONSIBILITY	STEP F TRAINER'S ASSESSMENT	COMMENTS
Veterinary Slaughter Reports		
Biological Residues		
Veterinary Services		
Supervision and Management		

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_____ Needs Processing Training _____ Needs Poultry Training

Trainee's Signature: _____ Date: _____

Trainer's Signature: _____ Date: _____

(This copy stays in the EDG.)

*Discuss with the FSIS Training Center as soon as possible.

VETERINARY INTERN PROGRAM

Meat and Poultry (904)

STEP A

District Office
Orientation
2 Days

STEP B

Designated Training Station
Plant Familiarization
Approximately 5 Days

STEP C

Designated Training Station
Technical OJT
Approximately 4 weeks

STEP D

Training Center Classroom
Supervision/Management,
Approximately 2 weeks

STEP E

Designated Training Station
OJT in IIC Responsibilities
Minimum of 2 weeks

STEP F

Designated Training station
Assessment Assignment
Trainee gets the opportunity to apply the new knowledge
and skills with limited supervision.
Minimum of 1 week

STEP G

Duty Station
Independent Assignment
Approximately 4 – 8 months

STEP H

Training Center
Seminar
(5) In-depth review of supervision/management responsibilities;
(2) in-depth review of IIC responsibilities; and (3) review of
carcass disposition.

TRAINING POLICIES & PROCEDURES FOR STEP G TRAINER

- Before the employee arrives at his/her duty station, review Step G of the 904 Employee Development Guide (EDG).
- Review the objectives in Step C and in Step E of the EDG.
- After the employee arrives, review the Training Reports in the employee's copy of the EDG.
- Try to give the employee a minimum of 2 weeks of close supervision and guidance followed by at least 6 to 8 weeks of limited supervision and guidance.
- Observe the employee's work and the results of the employee's work.
- Compare the employee's work with the objectives in Steps C and E.
- When the employee's work matches the objectives and is acceptable to you, initial and date the appropriate space on the Training Report in Step G of the EDG.
- Complete the Step G Training Report at the end of this step. If an area of responsibility is not available at the employee's duty station, so indicate in the comment column.
- If the employee's overall development has been unsatisfactory, please write your comments and recommendations on the Step G Training Report.
- Send the completed Step G Training Report to the employee's district training officer, and to the FSIS Training Center.
- Verify the time and date the employee is to report for the Step H seminar.

INDEPENDENT ASSIGNMENT

Introduction

During Step G, you will assume the full responsibilities of your job at your duty station. Your immediate supervisor will give you supervision and guidance during this 6-8 month period. During this period, your supervisor will also review your development by comparing your progress to the objectives in Steps C and E. When your supervisor determines that you have developed to the point where you are acceptable in all of your areas of responsibility, he/she will submit the 904 Step G Training Report to the district so that the district can enroll you in the Step H Seminar.

TRAINING REPORT

904 STEP G (MEAT)

Instructions to the immediate supervisor of Dr. _____.

This employee is nearing the end of the 904 training period. You should determine the employee's acceptability in all areas of responsibility. The following checklist is to help avoid oversights. As you determine acceptability in an area, date and initial in the column following that area.

INSERT CARBONS BEFORE COMPLETION

ABILITY TO PERFORM AND/OR TO SUPERVISE THE PERFORMANCE OF SUBORDINATES IN THE FOLLOWING AREAS OF RESPONSIBILITIES	IMMEDIATE SUPERVISOR'S INITIALS AND DATE OF ACCEPTANCE	COMMENTS
Health and Safety		
Preoperation and Operational Sanitation		
Antemortem Inspection and Humane Slaughter		
Postmortem Inspection (indicate applicable species with a check) ___ Cattle ___ Swine ___ Calves ___ Sheep ___ Equine		
Veterinary Livestock Dispositions		
Viscera Separation		
Control of Inedible and Condemned Material		
Control of Restricted Product		
Carcass Reinspection		
Boneless Meats Reinspection		
Food Preparation, Preservation, and Storage (indicate applicable areas with a check) ___ Fabrication & Portion Control ___ Edible Rendering & Refining ___ Labeling & Marking ___ Coolers, Shipping, & Receiving ___ Export		
Submission of Laboratory Specimens		

(Please send this copy to the FSIS Training Center, 200 Discovery Drive, College Station, TX 77845.)

TRAINING REPORT

904 STEP G (MEAT)

Instructions to the immediate supervisor of Dr. _____.

This employee is nearing the end of the 904 training period. You should determine the employee's acceptability in all areas of responsibility. The following checklist is to help avoid oversights. As you determine acceptability in an area, date and initial in the column following that area.

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ABILITY TO PERFORM AND/OR TO SUPERVISE THE PERFORMANCE OF SUBORDINATES IN THE FOLLOWING AREAS OF RESPONSIBILITIES	IMMEDIATE SUPERVISOR'S INITIALS AND DATE OF ACCEPTANCE	COMMENTS
Blueprints and Facilities		
Health and Safety		
Preoperation and Operational Sanitation		
Antemortem Inspection and Humane Slaughter		
Postmortem Inspection (indicate applicable species with a check) _____ Cattle _____ Swine _____ Calves _____ Sheep _____ Equine		
Veterinary Livestock Dispositions		
Viscera Separation		
Control of Inedible and Condemned Material		
Control of Restricted Product		
Carcass Reinspection		
Boneless Meats Reinspection		
Food Preparation, Preservation, and Storage (indicate applicable areas with a check) _____ Fabrication & Portion Control _____ Edible Rendering & Refining _____ Labeling & Marking _____ Coolers, Shipping, & Receiving _____ Export		
Submission of Laboratory Specimens		

(Please send this copy to the employee's district training officer.)

INSERT CARBONS BEFORE COMPLETION

ABILITY TO PERFORM AND/OR TO SUPERVISE THE PERFORMANCE OF SUBORDINATES IN THE FOLLOWING AREAS OF RESPONSIBILITIES:	IMMEDIATE SUPERVISOR'S INITIALS AND DATE OF ACCEPTANCE	COMMENTS
Tuberculin Reactor Procedure		
Veterinary Slaughter Reports		
Biological Studies		
Veterinary Services		
Supervision and Management		

I have reviewed the Employee Development Guide for a thorough understanding of this employee's development program. I have given serious consideration to all of the objectives mentioned in this Employee Development Guide. I have observed the employee's work, and I have monitored the results of the work he/she did with and without direct supervision. It is my opinion that this employee's overall development has been:

_____ satisfactory _____ unsatisfactory

ADDITIONAL COMMENTS: _____

Processing training and poultry training were not included in this employee's development program. If the employee needs this training before he/she will be ready to assume the full responsibility of his/her duty assignment please check the appropriate space(s).

_____ Needs Processing Training _____ Needs Poultry Training

Trainee's Signature: _____ Date: _____

Supervisor's Signature: _____ Date: _____

(Please send this report to the FSIS Training Center, 200 Discovery Drive, College Station, TX 77845.)

INSERT CARBONS BEFORE COMPLETION

ABILITY TO PERFORM AND/OR TO SUPERVISE THE PERFORMANCE OF SUBORDINATES IN THE FOLLOWING AREAS OF RESPONSIBILITIES:	IMMEDIATE SUPERVISOR'S INITIALS AND DATE OF ACCEPTANCE	COMMENTS
Tuberculin Reactor Procedure		
Veterinary Slaughter Reports		
Biological Studies		
Veterinary Services		
Supervision and Management		

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_____ Needs Processing Training _____ Needs Poultry Training

Trainee's Signature: _____ Date: _____

Supervisor's Signature: _____ Date: _____

(Please send this report to the employee's district training officer.)

VETERINARY INTERN PROGRAM

Meat and Poultry (904)

STEP A

District Office
Orientation
2 Days

STEP B

Designated Training Station
Plant Familiarization
Approximately 5 Days

STEP C

Designated Training Station
Technical OJT
Approximately 4 weeks

STEP D

Training Center Classroom
Supervision/Management,
Approximately 2 weeks

STEP E

Designated Training Station
OJT in IIC Responsibilities
Minimum of 2 weeks

STEP F

Designated Training station
Assessment Assignment
Trainee gets the opportunity to apply the new knowledge
and skills with limited supervision.
Minimum of 1 week

STEP G

Duty Station
Independent Assignment
Approximately 4 – 8 months

STEP H

Training Center
Seminar
(6) In-depth review of supervision/management responsibilities;
(2) in-depth review of IIC responsibilities; and (3) review of
carcass disposition.

SEMINAR
904 Step H

Class starting time: 8:00 a.m. on Tuesday of the first week.

Location; FSIS Training Center
200 Discovery Drive
College Station, TX 77845
(409) 260-9433 (commercial)

Class Ending Time: Thursday, 4:00 p.m. of the fourth week

Step H Schedule:

Travel Time	1 day
Supervision and Management	9 days
IIC Responsibilities	
Veterinary Livestock Dispositions (Part III—Case Studies)	9 days
Professional Disciplines	
Travel Time	1 day

NOTE: Please bring your EDG and Livestock Carcass Disposition Review booklet with you to College Station.

COURSE SCHEDULE

904 Step H

FIRST WEEK

Tuesday	Orientation HACCP/Pathogen Reduction Supervisory
Wednesday	HACCP/Pathogen Reduction Supervisory Supervision of the Performance System
Thursday	Supervision of the Performance System Coach, Mentor, Plan, Organize, Direct, Delegate
Friday	Communications

SECOND WEEK

Monday	Communications
Tuesday	Labor Management Relations
Wednesday	Labor-Management Relations Conflict Resolution/Problem Solving
Thursday	Conflict Resolution/Problem Solving Problem Employees and Employees with Problems
Friday	Problem Employees and Employees with Problems Summary

THIRD WEEK

Monday	Residue Workshop Granting/Refusing/Withdrawing/Withholding Inspection Establishment/IPPS Review HACCP
Tuesday	Residue Workshop Biotechnology Establishment/IPPS Review Workshop HACCP Microbiological Etiologies
Wednesday	Pathogen Reduction Red Meat Disease Disposition Workshop
Thursday	Bacterial Animal Disease Disposition Workshop Parasitology
Friday	Computer Concepts and Applications

FOURTH WEEK

Monday	Bacterial Animal Disease/Disposition Workshop Red Meat Disease Disposition Workshop
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Tuesday	Pathology
Wednesday	Food Animal Diseases
Thursday	Parasitology
	IIC Responsibilities
	Epidemiology of Foodborne Disease
	Summary

TRAINING REPORT

904 Step H

Dr. _____ completed the Step H Seminar of the 904
Veterinary Intern Program course at the FSIS Training Center on _____.

The seminar covered the following subjects:

- Supervision of the Performance System
- Coach, Mentor, Plan, Organize, Direct, Delegate
- Labor Management Relations
- Problem Employees and Employees with Problems
- HACCP/Pathogen Reduction Supervisory
- Communications
- Conflict Resolution/Problem Solving
- Residue Workshop
- Granting/Refusing/Withdrawing/Withholding Inspection
- Establishment/IPPS Review
- HACCP
- Microbiological Etiologies
- Pathogen Reduction
- Red Meat Disease Disposition Workshops
- Bacterial Animal Disease Disposition Workshop
- Parasitology
- Computer Concepts and Applications
- Pathology
- Food Animal Diseases
- IIC Responsibilities
- Epidemiology of Foodborne Disease

(126 Classroom Credit Hours)

REMARKS:

Training Center Staff

Trainee

Date